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FIBER ORGANON

Formerly Textile Organon

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A publication of *Fiber Economics Bureau*, Inc.

Highlights

- 1989 Directory of American Fiber Manufacturers...begins on page 243.
- Third Quarter 1989 Production, Shipments and Ending Stocks...begins on page 256.

SHIPMENTS:

In October, total manufactured fiber shipments reached 727 million pounds, 3% above the 707 million pounds shipped in September and 7% below the 780 million pounds shipped in October 1988.

October shipments of synthetic (noncellulosic) filament yarn fell slightly to 344 million pounds and staple+tow rose 6% to 364 million pounds.

Contributing to the increase of synthetic (noncellulosic) staple+tow shipments over the previous month were polyester up 18 million pounds or 10%.

Year-to-date domestic shipments of manufactured fiber are up 1% and exports are down 16%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1989		% CHG	1988	% CHG	YEAR TO DATE [d]		% CHG YTD
	OCT	SEP	10/89 - 9/89	OCT	10/89 - 10/88	1989	1988	1989-1988
ARTIFICIAL (CELLULOSIC)								
YARN	19.9	17.3	*+15.0*	18.6	*+7.0*	184.9	179.7	*+2.9*
RAYON STAPLE [d]	NA	NA	*NA*	NA	*NA*	NA	NA	*NA*
TOTAL ARTIFICIAL (CELL.)	**19.9**	**17.3**	***+15.0***	**18.6**	***+7.0***	**184.9**	**179.7**	***+2.9***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	28.8	28.6	*+0.7*	29.9	*-3.7*	304.0	310.1	*-2.0*
- CARPET	79.5	88.7	*-10.4*	87.8	*-9.5*	807.7	817.8	*-1.2*
- TEXTILE [a]	33.1	32.7	*+1.2*	32.9	*+0.6*	334.6	316.2	*+5.8*
POLYESTER - INDUSTRIAL	30.3	29.2	*+3.8*	31.4	*-3.5*	306.4	299.8	*+2.2*
- TEXTILE [a]	62.5	58.5	*+6.8*	77.7	*-19.6*	689.5	699.4	*-1.4*
OLEFIN	109.4	107.0	*+2.2*	106.2	*+3.0*	1053.3	1020.8	*+3.2*
TOTAL YARN	**343.6**	**344.7**	***-0.3***	**365.9**	***-6.1***	**3495.5**	**3464.1**	***+0.9***
STAPLE+TOW+FIBERFILL								
NYLON	85.9	85.5	*+0.5*	89.6	*-4.1*	822.6	808.0	*+1.8*
ACRYLIC+MODACRYLIC	44.0	44.1	*-0.2*	48.8	*-9.8*	458.2	491.0	*-6.7*
POLYESTER	200.4	182.0	*+10.1*	228.3	*-12.2*	1990.1	2007.4	*-0.9*
OLEFIN	33.4	33.1	*+0.9*	29.2	*+14.4*	317.8	301.2	*+5.5*
TOTAL STAPLE	**363.7**	**344.7**	***+5.5***	**395.9**	***-8.1***	**3588.7**	**3607.6**	***-0.5***
TOTAL SYNTHETIC (NONCELL.)	**707.3**	**689.4**	***+2.6***	**761.8**	***-7.2***	**7084.2**	**7071.7**	***+0.2***
TOTAL MANUFACTURED FIBER	**727.2**	**706.7**	***+2.9***	**780.4**	***-6.8***	**7269.1**	**7251.4**	***+0.2***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS [b]	687.4	671.0	*+2.4*	725.5	*-5.3*	6866.9	6770.2	*+1.4*
EXPORTS [c]	39.8	35.7	*+11.5*	54.9	*-27.5*	402.2	481.2	*-16.4*

NA No longer available

[a] Includes low denier industrial yarn.

[b] Includes olefin exports

[c] Excludes olefin exports.

[d] **Data for rayon staple no longer available.**

Fiber Organon

A Monthly Review
Formerly ***Textile Organon***

November 1989

CONTENTS

Features

1989 Directory of American Fiber Manufactures 243 - 252
- Notes & Definitions 243
- Artificial (Cellulosic) / Synthetic (Noncellulosic) Producers 244
- Olefin Producers 246
- Glass Fiber Producers 250
- Producing Plant Locations 252

Industry Regulars

Total U.S. Manufactured Fiber Shipments 241

Monthly U.S. Manufactured Fiber Data 253 - 255
- Imports by Country of Origin 253
- Imports by Fiber 254
- Exports by Fiber 255

Quarterly Manufactured Fiber Data 256 - 257
- Yarn+Monofilaments 256
- Staple+Tow 257

Selected U.S. Monthly Fiber Data 258

FIBER ECONOMICS BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc.
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Roseland, NJ 07068
U.S.A.
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1989 DIRECTORY OF AMERICAN FIBER MANUFACTURERS

NOTES & DEFINITIONS

This directory of producers is divided into the following categories:

(1) Artificial (Cellulosic) and Synthetic (Noncellulosic) Fibers
(2) Olefin Fiber
(3) Glass Fiber

The locality shown represents a plant site. Unless shown separately, the Head Sales Office address is the same as the Executive Office address.

The generic fiber names used in this survey are those established by the U.S. Federal Trade Commission (FTC). The *italicized* words are trademarks. All other fiber names are generic and appear in regular type.

- ● Indicates a company producing olefin fiber as well as other manufactured fiber(s). For example, Ametek produces olefin fiber (page 244) as well as nylon, polyester and saran.
- * Indicates a new plant, in the planning stage or under construction, or a new facility for producing a new product at an existing plant. Such facilities are not expected to be operable before 1990.

Yarn means filament yarn.
Monofil means an extruded monofilament and may be either a round or a rectangular (ribbon) cross-section. Monofilaments for bristles are excluded.
Film includes **Slit:** tape produced by slitting an already-attenuated wide sheet of olefin film; and **Split:** fibrillated slit film.
Not included in this survey is the slit film used for decorative or tying ribbon and such.
Rope includes braided and twisted rope as well as filler or core fiber.
Cordage is under 3/16" and includes tying and harvest (baler and binder) twine.
Industrial Goods means bags, bale wrap and protective covers, agricultural cloth, tarps and pool covers, etc.
Captive means that most or all of the fiber produced is consumed by the company in a vertical operation.

GENERIC NAMES

The following are generic names, in **bold** type, and a brief description of the fibers covered by each name shown in regular type.

GLASS FIBER

This fiber is made in two primary forms: continuous strand and staple sliver. Continuous strand is drawn fiber (i.e., from a textile-type bushing), while staple sliver, which is produced in relatively small amounts, is a blown fiber. Glass fiber thus ***does not*** include the substantial quantities of blown glass wool and pack, e.g., mat for air & liquid filtration, acoustical & thermal insulation, battery mats & separators and underground pipe wrap (except reinforcing).

Yarn & Strand: Continuous filament yarn and strand packaged for sale as such. Includes the yarn and strand used in the manufacture of nonwoven scrim for sale as such.
Roving: Two or more ends of untwisted strand. Includes spun strand roving (a single, continuous strand looped back on itself to give the equivalent of two or more strands) and roving for making woven roving
Mat: Mat in any nonwoven form as made from a continuous filament, i.e., continuous strand mat (filaments bonded with a suitable binder to form a membrane) and chopped strand mat (1/2" to 3" strands deposited in a random manner and resin bonded).
Chopped: Chopped yarn, strand or roving (1/4" to 3-3/4" length).
Milled: Hammer-milled yarn, strand or roving (1/32" to 1/4" length).
Staple Yarn & Sliver: A blown fiber, as noted, and means ribbons of generally parallel glass staple (3" to 15" random lengths) with or without a filament yarn reinforcement, with or without a binder, and slightly condensed to an approximately uniform cross section.

ARTIFICIAL (CELLULOSIC) FIBERS

Acetate: Artificial (cellulosic) acetate. Cigarette filtration tow is excluded.
Triacetate: Cellulose acetate, wherein not less than 92% of the hydroxyl groups are acetylated.
Rayon: Regenerated cellulose, including substitutions for not more than 15% of the hydrogens of the hydroxyl groups. Includes high wet modulus fiber.
Cupra: Cuprammonium rayon.
The viscose rayon yarns are identified as **ind** (industrial or high tenacity yarn) and **reg** (regular or textile yarn).

SYNTHETIC (NONCELLULOSIC) FIBERS

Acrylic: At least 85% acrylonitrile by weight.
Modacrylic: 35% to 84% acrylonitrile by weight, except when it qualifies as rubber.
Nylon: A long-chain synthetic polyamide in which less than 85% of the amide linkages are attached directly to two aromatic rings. The types are identified as 6, 66, etc. Where a company produces both type 6 and type 66, the designation 6/66 is used.
Aramid: A long-chain synthetic polyamide in which at least 85% of the amide linkages are attached directly to two aromatic rings.
Olefin: At least 85% ethylene, propylene or other olefin units by weight, except amorphous (noncrystalline) polyolefins qualifying as rubber. **E** means Polyethylene and **P** means Polypropylene. Also see adjoining notes on olefin fiber.
PBI: A long chain having recurring imidazole groups.
Polyester: At least 85% by weight of an ester of a substituted aromatic carboxylic acid, including but not restricted to substituted terephthalic units, and parasubstituted hydroxybenzoate units.
Saran: At least 80% vinylidene chloride by weight.
Spandex: At least 85% of segmented polyurethane.
Vinyon: At least 85% vinyl chloride by weight.

Other manufactured fibers included in this survey, but not listed by the FTC, are Polycarbonate and **TFE-** & **FEP**-fluorocarbon.

Not covered in this survey are fibers which would fall under the FTC's generic designations of rubber, lastrile, metallic and novoloid. Fibers falling under the FTC designations of anidex, azelon and nytril are not produced in the United States.

Carbon fibers are not included in this survey.

ALBANY INTERNATIONAL-MONOFILAMENT PLANT ●

EXECUTIVE OFFICE: 156 South Main Street, Homer, NY 13077

Fluoro	Homer, NY *Halar, Kynar, Tefzel* (monofil)
Nylon 6/66/612	Homer (monofil)
Polyester	Homer (monofil-regular & hydrolysis-resistant)

ALLIED-SIGNAL INC. ENGINEERED MATERIALS SECTOR, FIBERS DIVISION ●

EXECUTIVE OFFICE: 1411 Broadway, New York, NY 10018
REGIONAL SALES: 400 North Tustin Avenue, Santa Ana, CA 92705
2100 Fiber Park Drive, Dalton, GA 30720
64 South Miller Road, Akron, OH 44313

Nylon 6	Columbia, SC & Hopewell, VA *A.C.E., Anso-Tex, Anso IV HP, Anso V Worry Free, Anso X, Capiana, Caprolan, Caprolan 2000 Sea Gard, Caprolan 2000 Stay Gard, Capima, Captiva, Compet, Creme De Captiva, Hydrofil, Iron Clad, Patina, TEC* (yarn, monofil & staple)
Polyester	Moncure, NC *A.C.E., A.C.E. Sea Gard, Compet, Stay Gard* (yarn & monofil)

AMERICAN CYANAMID COMPANY, FIBERS DIVISION

EXECUTIVE OFFICE: One Cyanamid Plaza, Wayne, NJ 07470
REGIONAL SALES: 350 Fifth Avenue, Suite 2602, New York, NY 10118
P.O. Box 32787, Charlotte, NC 28232

Acrylic	Milton, FL *Creslan* (staple & tow)

AMERICAN POLYCRAFT, INC. ●

EXECUTIVE OFFICE: P.O. Box 3603, Dalton, GA 30721

Nylon 6	Dalton, GA (yarn)

AMETEK INC., SPECIAL FILAMENTS DIVISION ●

EXECUTIVE OFFICE: Box 339, Odenton, MD 21113

Nylon 6/66/612/11	Odenton, MD (monofil)
Polyester	Odenton (monofil)
Saran	Odenton (monofil)

AVTEX FIBERS INC.

EXECUTIVE OFFICE: Bldg. 200, Berwyn Park, Cassatt Road, P.O Box 880, Valley Forge, PA 19482

Polyester	Lewistown, PA *Avlin* (yarn)

BASF CORPORATION FIBERS DIVISION

EXECUTIVE OFFICE: P.O. Drawer D, Williamsburg, VA 23187
REGIONAL SALES: 5505 East Carson Street, Suite 205, Lakewood, CA 90713
500 Holiday Avenue, Dalton, GA 30720
111 West 40th Street, New York, NY 10018
Four Seasons Executive Center, 3A Terrace Way, Greensboro, NC 27403

Nylon 6	Enka, NC; Anderson & Central, SC and Lowland, TN *Crepeset, Shimmereen, Vivana, Zefsport, Zeftron, Zeftron 500, Zeftron 500 ZX* (yarn & staple)
Polyester	Lowland, TN *Golden Glow, Golden Touch, Silky Touch, Strialine, Ultra Touch* (yarn)
Rayon	Lowland, TN *Zantrel, Zantrel Plus* (staple)

BASF Corporation has carpet yarn spinning plants at Allendale, SC and Sylvania, GA.

BEAULIEU OF AMERICA, INC. ●

EXECUTIVE OFFICE: P.O. Box 4539, Dalton, Ga 30721

Nylon 6	Bridgeport, AL (yarn)

BERKLEY & CO. INC. ●

EXECUTIVE OFFICE: Highways 9 & 71, Spirit Lake, IA 51360

Nylon 6	Spirit Lake, IA (monofil)

CAMAC CORPORATION

A Subsidary of Cookson America, Inc.

EXECUTIVE OFFICE: P.O. Box 1004, Bristol, VA 24203

Nylon 6	Bristol, VA *Camalon* (yarn)

COLOR-FI, INC.

EXECUTIVE OFFICE: P.O Box 469, Edgefield, SC 29824

Nylon	Sumter & Trenton, SC (staple & tow)
Polyester	Sumter & Trenton (staple)

CONCORDE FIBERS, INC.

EXECUTIVE OFFICE: P.O. Box 200, Highway 45, Jamestown, SC 29453

Nylon 6	Jamestown, SC (yarn)

CORTLAND LINE COMPANY, INC.

EXECUTIVE OFFICE: 3736 Kellogg Road, Cortland, NY 13045

Nylon 6	Cortland, NY (monofil-captive)

COURTAULDS FIBERS INC.

EXECUTIVE OFFICE: 104 West 40th Street, New York, NY 10018
REGIONAL SALES: P.O Box 141, Axis, AL 36505

Rayon	Le Moyne, Mobile County, AL *Fibro* (staple)

DORSETT CARPET MILLS INC. ●

BCF YARN DIVISION

EXECUTIVE OFFICE: P.O. Box 740, Chatsworth, GA 30705

Nylon 6	Chatsworth, GA (yarn)

E. I. DU PONT DE NEMOURS & COMPANY (INC.) ●

FIBERS DEPARTMENT ●

EXECUTIVE OFFICE: Wilmington, DE 19880
REGIONAL SALES: 5500 Union Pacific Avenue, City of Commerce, CA 90022
1251 Avenue of the Americas, New York, NY 10020
6250 Fairview Road, Charlotte, NC 28234
2770 West Market Street, Akron, OH 44313
300 Franklin Bldg., Eastgate Center, Chattanooga, TN 37411

Acrylic	Camden, SC & Waynesboro, VA *Orlon* (staple & tow)
Aramid	Richmond, VA *Kevlar* (yarn), *Nomex* (yarn, staple & tow)
Nylon 66	Seaford, DE; Camden, SC; Chattanooga, TN and Martinsville, Richmond & Waynesboro, VA *Antron* (yarn, monofil, staple & tow)
Polyester	Kinston & Wilmington, NC; Camden & Charleston, SC *Dacron,* (yarn, staple, tow & fiberfill)
Spandex	Waynesboro *Lycra* (fused multifil or coalesced monofil)

POLYMER PRODUCTS DEPARTMENT

EXECUTIVE OFFICE: See Listing Above.

Nylon 6/66/612 & Polyester	Parkersburg, WV *Dacron, Dymetrol, Tynex, Vylor* (monofil of 50 denier & coarser)

EASTMAN KODAK COMPANY

EASTMAN CHEMICALS DIVISION

EXECUTIVE OFFICE: Kingsport, TN 37662
MARKETER: EASTMAN CHEMICAL PRODUCTS, INC., P.O. Box 431, Kingsport, TN 37662
REGIONAL SALES: 1133 Avenue of the Americas, New York, NY 10036

Acetate	Kingsport, TN *Chromspun, Estron* (yarn)
Polyester	Kingsport, TN & Columbia, SC *Kodel* (staple)

FIBER INDUSTRIES

A WHOLLY OWNED SUBSIDIARY OF WELLMAN, INC.

EXECUTIVE OFFICE: 5146 Parkway Plaza Blvd., Charlotte, NC 28217
SALES OFFICE: 1133 Avenue of the Americas, New York, NY 10036
REGIONAL SALES: 4040 Summit Drive, Marietta, GA 30068

Polyester	Fayetteville, NC & Darlington, SC Fortrel (yarn & staple)

FIRESTONE FIBERS & TEXTILES COMPANY

DIVISION OF FIRESTONE TIRE & RUBBER COMPANY

EXECUTIVE OFFICE: P.O. Box 1278, Gastonia, NC 28052

Polyester	Hopewell, VA (yarn)

FOSS MANUFACTURING COMPANY, INC. ●

EXECUTIVE OFFICE: Ward Hill Industrial Park, Haverhill, MA 01830
PLANT OFFICE: Haverhill, MA 01830

Polyester	Haverhill, MA (staple-captive)

GLOBE MANUFACTURING CO.

EXECUTIVE OFFICE: 456 Bedford Street, Fall River, MA 02720

Spandex	Fall River, MA & Gastonia, NC *Cleerspan,* DC-$_{100,}$ DC-$_{700,}$ *Glospan* (fused multifil)

THE GOODYEAR TIRE & RUBBER COMPANY, POLYESTER DIVISION

EXECUTIVE OFFICE: Akron, OH 44316

Polyester	Scottsboro, AL & Point Pleasant, WV (yarn-captive)

GOLCO ●

EXECUTIVE OFFICE: 218 River Road, Cartersville, GA

Nylon	Cartersville, GA (yarn)*

GULF FIBERS INC.

EXECUTIVE OFFICE: Falk Industries, Inc., 569 Broadway, New York, NY 10012

Nylon 6	Le Moyne, Mobile County, AL (monofil)

HANOVER FIBERS DIVISION, GUILFORD MILLS INC.

EXECUTIVE OFFICE: 4925 West Market Street, Greensboro, NC 27402
REGIONAL SALES: 200 Dickens Road, P.O. Box 788, Fuquay-Varina, NC 27526

Nylon 6	Gainesville, GA (monofil)
Polyester	Fuquay-Varina, NC (yarn & monofil)

HOECHST CELANESE CORPORATION

EXECUTIVE OFFICE: 202-206 North, Somerville, NJ 08876
1211 Avenue of the Americas, New York, NY 10036
REGIONAL SALES: 110 East 9th Street, Room A 1229, Los Angeles, CA 90079
6000 Lake Forest Drive, Suite 300, Atlanta, GA 30328
P.O. Box 32414, Charlotte, NC 28232
2950 West Market Street, Akron, OH 44313

Acetate	Rock Hill, SC *(Celriver)* & Narrows, VA *(Celco)* (yarn, staple & tow)
Polyester	Salisbury & Shelby, NC and Spartanburg, SC *Angelette, Ceylon, Comfort Fiber, ESP, Loftguard, Polar-Guard, Serene, Superba, Trevira* (yarn, staple, tow & fiberfill)
PBI	Rock Hill (staple)

JAMES RIVER CORPORATION ●

EXECUTIVE OFFICE: 545 North Pleasantburg Drive, Greenville, SC 29607

Nylon 6/66	Cantonment, FL *Cerex* (spunbonded)
Polyester	Milford, NJ and Simpsonville, SC *Polyweb* (thermal bond & meltblown)

JOHNSON FILAMENTS, INC. ●

EXECUTIVE OFFICE: Industrial Avenue, Williston, VT 05495

Nylon 6/66	Williston, VT (monofil)
Polyester	Williston (monofil)

KAYSER-ROTH HOSIERY INC., YARN MANUFACTURING DIVISION

EXECUTIVE OFFICE: 2303 West Meadowview Road, Greensboro, NC 27407

Nylon 66	Creedmoor, NC (yarn-captive)

MONOFILAMENTS, INC.

EXECUTIVE OFFICE: 1401 Hopeman Parkway, Waynesboro, VA 22980

Nylon 6/66	Waynesboro, VA (monofil)
Polycarbonate	Waynesboro (monofil)
Polyester	Waynesboro (monofil)

*The company also produces fusible nylon (monofil) at its Waynesboro facility.

MONSANTO COMPANY

EXECUTIVE OFFICE: 800 North Lindbergh Blvd., St. Louis, MO 63167

MONSANTO CHEMICAL COMPANY, FIBERS & ENGINEERED PRODUCTS DIVISION

REGIONAL SALES: 24012 Calle de la Plata, Suite 250, Laguna Hills, CA 92653
320 Interstate North Parkway, Atlanta, GA 30339
1460 Broadway, 11th Floor, New York, NY 10036
6230 Fairview Road, Charlotte, NC 28210
260 Springside Drive, P.O. Box 5444, Akron, OH 44313

Acrylic	Decatur, AL *Acrilan, Acrilan II, Bi-Loft, Cy-Fana, Du-Rel, Fi-Lana II, Pa-Qel, Pil-Trol So-Lara, So-Qel* (staple & tow)
Modacrylic	Decatur *SEF, SEF Plus* (staple & tow)
Nylon 66	Pensacola, FL & Greenwood, SC *No-Shock, Ultron* (yarn & staple)

NORTH AMERICAN POLYESTER CORPORATION

Subsidiary of North American Rayon Corporation

EXECUTIVE OFFICE: West Elk Avenue, Elizabethton, TN 37643

Polyester	Elizabethton, TN (staple)

NORTH AMERICAN RAYON CORPORATION

EXECUTIVE OFFICE: West Elk Avenue, Elizabethton, TN 37643
REGIONAL SALES: 500 Fifth Avenue, New York, NY 10110

Rayon	Elizabethton, TN (ind & reg yarn & tow)

PHILLIPS FIBERS CORPORATION ○

Subsidiary of Phillips 66 Company

EXECUTIVE OFFICE: P.O. Box 66, Interstate 85, Greenville, SC 29602

Sulfar	Rocky Mount, NC *Ryton* (staple)

REEMAY, INC. ●

EXECUTIVE OFFICE: P.O. Box 511, Old Hickory, TN 37138

Polyester	Old Hickory, TN *Reemay* (spunbonded)

SHAKESPEARE COMPANY, MONOFILAMENT DIVISION ●

SALES OFFICE: 6111 Shakespeare Road, P.O. Box 4060, Columbia, SC 29240

Nylon 6/66/610	Columbia, SC (monofil thread)
Polyester	Columbia (monofil thread)

STAR FIBERS, INC.

EXECUTIVE OFFICE: P.O. Box 588, Edgefield, SC 29824
REGIONAL SALES: Edgefield, SC 29824

Nylon 6/66	Edgefield, SC *Starbrite* (staple)

TOLARAM FIBERS, INC. ●

EXECUTIVE OFFICE: P.O. Box 436, Highway 52 North, Ansonville, NC 28007-0436

Nylon 66	Ansonville, NC (yarn)
Polyester	Ansonville & Asheboro, NC (yarn)

T.M.G. HOLDINGS

Affiliate of the Mann Group, Inc.

EXECUTIVE OFFICE: 3411 North Rockingham Road, Greensboro, NC 27404

Acrylic	Williamsburg, VA *Zefran, Zefkrome* (staple)

WELLMAN, INC., MAN-MADE FIBER DIVISION

EXECUTIVE OFFICE: P.O. Box 188, Johnsonville, SC 29555
1040 Broad Street, Suite 302, Shrewsbury, NJ 07702
REGIONAL SALES: 1200 East Morehead Street, Charlotte, NC 28204
25 Braintree Hill Park, Suite 206, Braintree, MA 02184

Nylon 6/66	Johnsonville, SC *Wellon, Wellstrand* (staple, tow & tops)
Polyester	Johnsonville *Fillwell, Wellene, Wellstrand* (staple & tow)

YKK ZIPPER CO.

Polyester	Macon, GA (yarn)

OLEFIN FIBER

ACS INDUSTRIES, INC.

EXECUTIVE OFFICE: 71 Villanova Street, Woonsocket, RI 02895
PLANT: Woonsocket, RI (P yarn & multifil)

ALADDIN MILLS, INC.
EXECUTIVE OFFICE: P.O. Box 2208, Dalton, GA 30722
PLANT: Dalton, GA (P yarn)

ALBANY INTERNATIONAL - MONOFILAMENT PLANT
EXECUTIVE OFFICE: See Listing on Page 244.
PLANT: Homer, NY (P monofil)

ALLIED-SIGNAL INC. ENGINEERED MATERIALS SECTOR, FIBERS DIVISION
EXECUTIVE OFFICE: See Listing on Page 244.
PLANT: Chesterfield, VA *Spectra* (E yarn & staple)

AMERICAN MANUFACTURING COMPANY
EXECUTIVE OFFICE: 200 South Park Road, Lafayette, LA 70505
REGIONAL SALES: 107 Trumball Street, Elizabeth, NJ 07206
5854 Hollis Street, Emeryville, CA 94608
1520 Industrial Blvd., Jacksonville, FL 32205
6110 Bienvenue Street, New Orleans, LA 70117
1715 South 11th Street, St. Louis, MO 63104
1350 Kress Street, Houston, TX 77020
5050 First Avenue South, Seattle, WA 98134
LAFAYETTE ROPE DIVISION
PLANT: Lafayette, LA *Amco, American, Bondtie, Floterope, Ultraline* (E & P monofil & film)

AMERICAN POLYCRAFT, INC.
EXECUTIVE OFFICE: See Listing on Page 244.
PLANT: Dalton, GA (P yarn & film)

AMETEK INC., SPECIAL FILAMENTS DIVISION
EXECUTIVE OFFICE: See Listing on Page 244
PLANT: Odenton, MD (E & P monofil)

AMOCO FABRICS & FIBERS COMPANY
EXECUTIVE OFFICE: 900 Circle 75 Parkway, Suite 550, Atlanta, GA 30339
REGIONAL SALES: 15066 Shoemaker Avenue, Santa Fe Springs, CA 90670
P.O. Box 911, Dalton, GA 30722-0911
P.O. Box 3667, 835 Shugart Rd., Dalton, GA 30721-0667
PLANT: Andalusia & Roanoke, AL; Bainbridge, Hazlehurst & Nashville, GA; Salisbury, NC & Afton, VA (P yarn, monofil, film & staple)
The company produces *PolyBac, PolyBac A/S and PolyBac FLW* primary carpet backing; *ActionBac* secondary carpet backing; *Amopave* and *Propex* industrial fabrics; *Condesa* luggage fabrics; *Patlon III, Amoco XXV, Marquesa Lana* and *Marquesa Lana/ST* commercial carpet yarns; *Synera* apparel yarn; *Amoweve* and *Saqqara* wallcoverings; *Essera* and *Trace* upholstery yarns and *Genesis* residential carpet yarn.

ARLIN MFG. CO., INC.
EXECUTIVE OFFICE: 239 Industrial Avenue, Lowell, MA 01853
PLANT: Lowell, MA (P film)

ARMSTRONG WORLD INDUSTRIES, INC.
EXECUTIVE OFFICE: Lancaster, PA 17604
PLANT: Charlotte, NC (P film-captive)
The company weaves carpet backing.

BEAULIEU OF AMERICA, INC.
EXECUTIVE OFFICE: See Listing on Page 244.
PLANT: Bridgeport, AL & Dalton, GA (P yarn)

BERKLEY & CO. INC.
EXECUTIVE OFFICE: See Listing on Page 244.
PLANT: Spirit Lake, IA (E & P monofil-captive)

BLUE MOUNTAIN INDUSTRIES
EXECUTIVE OFFICE: 20 Blue Mountain Road, Blue Mountain, AL 36201
PLANT: Blue Mountain, AL *Gold Medal, Poly Autotwine, Poly Macramé, Polylasting, TY-EZ Polytape, Tylon, Tytite* (E & P film cordage)

BRIDON CORDAGE INC.
EXECUTIVE OFFICE: 909 16th Street, Albert Lea, MN 56007
PLANT: Albert Lea, MN (P film cordage)

BURLINGTON INDUSTRIES, INC.
EXECUTIVE OFFICE: P.O. Box 21207, Greensboro, NC 27420
PLANT: Greensboro, NC (P yarn)

CALIFORNIA WEBBING INDUSTRIES, INC.
EXECUTIVE OFFICE: 4560 Pacific Blvd., Los Angeles, CA 90058
PLANT: Los Angeles, CA (P yarn)

CARRIAGE INDUSTRIES
EXECUTIVE OFFICE: Box 542, Calhoun, GA 30701
PLANT: Calhoun, GA (P yarn)

CHASE PACKAGING CORPORATION
EXECUTIVE OFFICE: 2 Greenwich Plaza, Greenwich, CT 06830
PLANT: Portland, OR (P film industrial goods)

COLUMBIAN ROPE COMPANY
EXECUTIVE OFFICE: P.O. Box 270, Highway 45 North, Guntown, MS 38849
REGIONAL SALES: P.O. Box 270, Highway 45 North, Guntown, MS 38849
PLANT: Guntown, MS *Polypro 6* (E & P monofil & film)

CROWE ROPE COMPANY
EXECUTIVE OFFICE: Warren, ME 04864
PLANT: Warren, ME *Crowelon* (P monofil & film)

CUMBERLAND MILLS, INC.
EXECUTIVE OFFICE: 1010 North Hamilton Street, Dalton, GA 30720
PLANT: Dalton, GA (P yarn)

CUTLASS CARPET COMPANY
PLANT: Dalton, GA (P yarn)

DIAMOND MILLS, INC.
EXECUTIVE OFFICE: P.O. Box 46, Eton, GA 30724
PLANT: Eton, GA (P yarn & film)

DORSETT CARPET MILLS, INC.
BCF YARN DIVISION
EXECUTIVE OFFICE: See Listing on Page 245.
PLANT: Chatsworth, GA (P yarn)

E. I. DU PONT DE NEMOURS & COMPANY (INC.)
FIBERS DEPARTMENT
EXECUTIVE OFFICE: See Listing on Page 245.
PLANT: Richmond, VA *Tyvek* (E spunbonded)
Chattanooga, TN (P yarn)

ELIZABETH WEBBING MILLS CO., INC.
EXECUTIVE OFFICE: 521 Roosevelt Avenue, Central Falls, RI 02862
PLANT: Central Falls, RI (P yarn & film)

ENSIGN-BICKFORD INDUSTRIES, INC.
FILM FIBERS DIVISION
EXECUTIVE OFFICE: 630 Hopmeadow Street, Simsbury, CT 06070
PLANT: Simsbury, CT (P film)

EXXON CHEMICAL COMPANY,
POLYMERS GROUP - TEXTILES DIVISION
DIVISION HEADQUARTERS: 2550 West Fifth North Street, Summerville, SC 29483-9699
MARKETING OFFICE: 2100 River Edge Parkway, Suite 1025, Atlanta, GA 30328-4654
PLANT: Summerville, SC (P monofil & film fabrics)
The company also weaves *Baxon* carpet backing and packaging fabrics at Summerville, SC.

POLYMERS GROUP - TWINE DIVISION
DIVISION HEADQUARTERS: 100 South Penalosa, Kingman, KS 67068
MARKETING OFFICE: 100 South Penalosa, Kingman, KS 67068
PLANT: Kingman, KS (P monofil & film cordage)
Clearfield, UT (P monofil & film cordage)

FIBERS & FABRICS OF GEORGIA, INC.
Subsidiary of Georgia Synthetics, Inc.
EXECUTIVE OFFICE: P.O. Box 962, Elberton, GA 30635
PLANT: Elberton, GA (P yarns, fibrillated, roll embossed filaments & slit tape)

FIBERS SOUTH, INC.
EXECUTIVE OFFICE: P.O. Box 189, Trussville, AL 35173
PLANT: Trussville, AL *Polystar, Trustite & Tyrite* (P film, monofil, tapes & staple)

FILAMENT FIBER TECHNOLOGY INCORPORATED
EXECUTIVE OFFICE: 571 West Lake Avenue, Bay Head, NJ 08742
PLANT: Salisbury, NC (P fine denier yarn)

FNT INDUSTRIES, INC.
EXECUTIVE OFFICE: 927 First Street, Menominee, MI 49858
PLANT: Menominee, MI (E monofil)

FOSS MANUFACTURING CO., INC.
EXECUTIVE OFFICE: See Listing on Page 245.
PLANT: Haverhill, MA (P staple-captive)

GENERAL FIBERS & FABRICS, INC.
EXECUTIVE OFFICE: Orchard Hill Road, La Grange Industrial Park, La Grange, GA 30240
PLANT: La Grange, GA (P film)
The company also weaves *Supertuft* carpet backing as well as bagging and woven polypropylene fabrics here.

GEORGIA SYNTHETICS, INC.
EXECUTIVE OFFICE: P.O. Box 962, Elberton, GA 30635
PLANT: Elberton, GA (PP carpet backing, industrial fabrics)

GFF HOLDING COMPANY
(Formerly NSI, Inc.)
ADMINISTRATIVE OFFICE: Box 658, Soperton, GA 30457
PLANT: Soperton, GA (P film-captive)
The company weaves carpet backing here.

GOLCO
EXECUTIVE OFFICE: See Lsting on Page 245.
PLANT: Cartersville, GA (P yarn)

HERCULES INCORPORATED

ABSORBENT AND TEXTILE PRODUCTS GROUP

EXECUTIVE OFFICE: Hercules Plaza, Wilmington, DE 19894
MARKETING HEADQUARTERS: 3169 Holcomb Bridge Road, Suite 301, Norcross, GA 30071
REGIONAL SALES: 280 Railroad Avenue, Greenwich, CT 06830
PLANT: Oxford, GA *Elustra, Herculon, Nouvelle* (P yarn & staple)

THE HOOVEN & ALLISON COMPANY

EXECUTIVE OFFICE: 677 Cincinnati Avenue, Xenia, OH 45385
PLANT: Xenia, OH (P film)

INTEGRATED PRODUCTS, INC.

EXECUTIVE OFFICE: P.O. Box 1791, Rome, GA 30163 - 3001
PLANT: Rome, GA (P staple)

INTERLOOM LTD.

FORMERLY CONCORDE FIBERS, INC.

EXECUTIVE OFFICE: Box 2279, Dalton, GA 30722
PLANT: Dalton, GA (P yarn)

J & J INDUSTRIES

EXECUTIVE OFFICE: P.O. Box 1287, Dalton, GA 30722
PLANT: Dalton, GA (P yarn)

JAMES RIVER CORPORATION

EXECUTIVE OFFICE: See Listing on Page 245
PLANT: Milford, NJ, Simpsonville, SC and Washougal, WA *Celestra, Fibretex* (P spunbonded)

JOHNSON FILAMENTS

EXECUTIVE OFFICE: See Listing on Page 245
PLANT: Williston, VT (P monofil)

KIMBERLY-CLARK CORPORATION

EXECUTIVE OFFICE: 1400 Holcomb Bridge Road, Roswell, GA 30076
PLANT: Corinth, MS; Balfour, NC; La Grange, GA & Neenah, WI *Accord, Duraguard, Evolution* (P spunbonded), *Cyclean, Evolution III* (P spunbonded/meltblown laminate)

LAMBETH CORPORATION

EXECUTIVE OFFICE: 627 Tarkiln Hill Road, New Bedford, MA 02745
PLANT: New Bedford, MA *Lambeth* (E & P monofil)

LAWRENCE HOSE COMPANY

SALES OFFICE: P.O. Box 1838, Burlington, NC 27215
PLANT: Burlington, NC (E monofil-captive)

LORETEX CORPORATION

EXECUTIVE OFFICE: Northeastern Industrial Park, Bldg. 18, P.O. Box 45, Guilderland Center, NY 12085
REGIONAL SALES: Research Plastics Marketing, 9 Pickering Way, Salem, MA 01970
PLANT: Guilderland Center, NY (E film-captive)

MIRAFI INC.

Subsidiary of Dominion Textiles

EXECUTIVE OFFICE: P.O. Box 240967, Charlotte, NC 28224
PLANT: Moultrie, GA (P film-captive)

ORIAN

EXECUTIVE OFFICE: P.O. Box 2276, Anderson, SC 29622
PLANT: Anderson, SC (P yarn)

THE OSTERNECK COMPANY

EXECUTIVE OFFICE: P.O. Box 859, Lumberton, NC 28359
PLANT: Lumberton, NC (P film)

The company weaves industrial goods here, and converts into tubing & bale wraps.

PHILLIPS FIBERS CORPORATION

Subsidiary of Phillips 66 Company

EXECUTIVE OFFICE: See Listing on Page 246.
PLANT: Rocky Mount, NC; Seneca & Spartanburg, SC *Alpha, Marvess* (P yarn, staple & tow)

The company also manufactures *Duon, Petromat, Rufon & Supac* nonwoven fabrics at Seneca, SC.

POLI -TWINE INC.

EXECUTIVE OFFICE Box 1255, Bldg. A16A, Freeport Center, Clearfield, UT 84016
PLANT: Clearfield, UT (P monofil, P film, rope & cordage)

POLYLOOM CORPORATION OF AMERICA

EXECUTIVE OFFICE: 1615 North Broadway, P.O. Box 289, Dayton, TN 37321
PLANT: Dayton, TN *Polyloom* (P split film)

PRINCETON (CARPET IND. OF N.A.)

EXECUTIVE OFFICE: P.O. Box 548, Adairsville, GA 30103
PLANT: Adairsville, GA (P yarn)

REEMAY, INC.

EXECUTIVE OFFICE: See Listing on Page 246.
PLANT: Old Hickory, TN *Typar, Typelle, Tekton, Biobarrier,* (P spunbonded)

SARLON INDUSTRIES, INC.
EXECUTIVE OFFICE: 775 N.W. 71st Street, Miami, FL 33150
PLANT: Miami, FL (P monofil & film)

SHAKESPEARE MONOFILAMENT DIVISION
EXECUTIVE OFFICE: See Listing on Page 246.
PLANT: Columbia, SC (P monofil)

SHUFORD MILLS, INC.
EXECUTIVE OFFICE: Highland Avenue & 15th Street, N.E., Hickory, NC 28601
PLANT: Hickory, NC (P film, cordage & twine)

SOLUTION FIBERS INC.
EXECUTIVE OFFICE: P.O. Box 447, 110 West McCarter Road, Lafayette, GA 30728
PLANT: Lafayette, GA *Better Body, Luxene* (P yarn)

SOUTHERN WEAVING, INC.
PLANT: Greenville, SC (P yarn)

STEVENS FIBER DIVISION, STEVENS LINEN ASSOC., INC.
EXECUTIVE OFFICE: P.O. Box 220, Webster, MA 01570
PLANT: Dudley, MA (P staple)

SUNSHINE ROPE MANUFACTURING INC.
EXECUTIVE OFFICE: 7250 N.W. 41 Street, Miami, FL 33166-6799
PLANT: Miami, FL (E & P monofil, cordage)

SYNTHETIC INDUSTRIES
EXECUTIVE OFFICE: 309 Lafayette Road, Chickamauga, GA 30707
PLANT: Chickamauga & Dalton, GA (P film, yarn & staple)

SYNTHETIC INDUSTRIES, FIBRON DIVISION
EXECUTIVE OFFICE: Chickamauga, GA
PLANT: Chattanooga, TN *Fibri-Cord, Fibri-Knit, Fibrilawn, Fibrilon* (P film)

TECHLON FIBERS CORPORATION
EXECUTIVE OFFICE: 3359 Blake Drive, Dalton, GA 30720
PLANT: Dalton, GA (P yarn)

TECHNOTRADE
PLANT: Dalton, GA (P yarn)

TOLARAM FIBERS, INC.
EXECUTIVE OFFICE: See Listing on Page 246.
PLANT: Ansonville, NC (P yarn)

TRUSTITE, DIVISION OF FIBERS SOUTH INC.
EXECUTIVE OFFICE: See Listing on page 248.
PLANT: Clearfield, UT *Trustite, Tyrite* (P film)

TWINE PRODUCTS CORPORATION
EXECUTIVE OFFICE: 201 Dufossat, P.O. Box 15285, New Orleans, LA 70175
PLANT: New Orleans, LA (P film)

UNITED STATES ROPE COMPANY
EXECUTIVE OFFICE: 711 Hamilton Avenue, Menlo Park, CA 94025
PLANT: Menlo Park, CA (P monofil)

WALL INDUSTRIES, INC.
EXECUTIVE OFFICE: P.O. Box 830, Granite Quarry, NC 28072
PLANT: Granite Quarry, NC (E & P monofil, rope and cordage)

WALTRICH PLASTIC CORPORATION
EXECUTIVE OFFICE: P.O. Box D, Walthourville, GA 31333
PLANT: Walthourville, GA (P monofil)

WAYN-TEX, INC.
EXECUTIVE SALES OFFICE: Box 648, Dalton, GA 30720
PLANT: Waynesboro, VA, *Beamette, Wayntuf* (E & P monofil & P film-captive, spunbonded)
The company weaves *Wayntuf* primary carpet backing (captive)

WELLINGTON PURITAN MILLS (MONTAIR DIV.)
EXECUTIVE OFFICE: Nelson Street, Pilot Mountain, NC 27401
PLANT: Pilot Mountain, NC *Pur-Ty, Welltite* (P yarn & E & P monofil & film)

WELLINGTON SYNTHETIC FIBRES, INC.
EXECUTIVE OFFICE: 52 Courtland Street, Paterson, NJ 07503
PLANT: Leesville & Summerville, SC (P yarn & monofil)
The company also weaves outdoor furniture webs at Leesville.

The following companies are also producing a variety of textile products from olefin: **Cirtex** (P film); **Continental** (P yarn); **Conwed Corp. Conwed Plastic Netting** (P embossed film for netting); **Dicey** (P yarn); **E.I. du Pont De Nemours & Company (Inc.)** (E & P embossed film for netting); **Hercules Incorporated, Polymers Division** *Delnet* (E embossed film for netting); **Nalle Inc.** (P embossed film for netting); **Riegel Products Corporation** *Polyweb* (P meltblown); and **The 3M Company** (P spunbonded).

GLASS FIBER

CERTAINTEED CORPORATION

FIBER GLASS REINFORCEMENTS DIVISION

EXECUTIVE OFFICE: P.O. Box 860, Valley Forge, PA 19482
REGIONAL SALES: 1801 East Parkcourt Street, Bldg. D., Suite 104, Santa Ana, CA 92701
4131 N.W. 13th Street, Suite 202, Gainesville, FL 32609
854 Fairway Drive, Bensenville, IL 60106
1 City Centre, 120 West 7th, Suite 312, Bloomington, IN 47401
533-A Mur Len Road, Olathe, KS 66062
12 Fox Run Drive, Ashtabula, OH 44004
1720-C Indian Wood Circle, Maumee, OH 43537
P.O. Box 1329, Kulpsville, PA 19443
2811 Reidville Road, West Oak Square, Suite 12, Spartanburg, SC 29301
4811 Lebanon Road, Suite 107, Hermitage, TN 37076
6326 Hart, Fort Worth, TX 76112
1420 N.W. Gilman Blvd., Suite 2593, Issaquah, WA 98027
PLANT: Wichita Falls, TX (roving, woven roving, mat, chopped strand & combination product)

FIBER GLASS INDUSTRIES, INC.

EXECUTIVE OFFICE: RD 5, Edson Street, Amsterdam, NY 12010
PLANT: Amsterdam, NY (roving & chopped, woven, mats)

GAF BUILDING MATERIALS CORPORATION

EXECUTIVE OFFICE: 1361 Alps Road, Wayne, NJ 07670
PLANT: Irwindale, CA (chopped), Nashville, TN (chopped)

GFT, INC. (GLASS FIBER TECHNOLOGY)

EXECUTIVE OFFICE: P.O. Box 670, Chester, SC 29706
PLANT: Chester, SC (wet chop for shingles)

LUNDY TECHNICAL CENTER

EXECUTIVE OFFICE: Pompano Beach, FL 33064
PLANT: Pompano Beach, FL *RoMHOglas* (metallized glass fiber roving & strand and nonwoven metallized glass mat)

MANVILLE SALES CORPORATION

MATS, FIBER & REINFORCEMENTS DIVISION

EXECUTIVE OFFICE: P.O. Box 517, Toledo, OH 43693
PLANT: Waterville, OH, Etowah, TN & Ennis, TX *Chop-Pak, Dura-Glass, Star Rov, Star Stran, Tempstran* (mat, chopped strand, staple, yarn, sliver, rovings & microfiber)

NICOFIBERS CO.

EXECUTIVE OFFICE: 9702 Ironpoint Road, Shawnee, OH 43782
PLANT: Shawnee, OH *Conformat, Surmat* (mat)

NITTOBO-SCHWEBEL CORPORATION *

(yarn)

OWENS-CORNING FIBERGLAS CORPORATION

EXECUTIVE OFFICE: Fiberglas Tower, Toledo, OH 43659
REGIONAL SALES: 4 Hutton Centre Drive, Suite 100, Santa Anna, CA 92707
750 Lake Cook Road, Suite 201, Buffalo Grove, IL 60089
15300 West 8 Mile, Oak Park, MI 48237
Bldg. 5601, 77 Center Drive, Suite 240, Charlotte, NC 28210
5700 Pearl Road, Suite 104, Cleveland, OH 44129
900 West Valley Road, Suite 1101, Wayne, PA 19087
12750 Merit Drive, Suite 100, Park Central VII, Dallas, TX 75251
PLANT: Huntingdon, PA, Aiken & Anderson, SC & Amarillo, TX *Araton, Beta, Bi-Ply, Fiberglas, S-Glass, S-2 Glass, Type 30* (yarn, roving, woven roving, mat chopped & milled)

PPG GLASS FIBERS LTD.

FIBER GLASS PRODUCTS

EXECUTIVE OFFICE: One PPG Place, Pittsburgh, PA 15272
REINFORCEMENT PRODUCTS:
REGIONAL SALES: 23441 South Pointe Drive, Suite 145, Laguna Hills CA 92653
400 Northridge Road, Suite 110, Atlanta, GA 30350
710 East Ogden Avenue, Suite 225, Naperville, IL 60563
5875 New King Court, P.O. Box 3510, Troy, MI 48007-3510
AUTOMOTIVE SALES OFFICE: 710 East Ogden Avenue, Suite 225, Naperville, IL 60563
TEXTILE PRODUCTS: 825 East Majestic Court, Gastonia, NC 28054
2253 South Avenue, Westfield, NJ 07090
PLANT: Lexington & Shelby, NC (yarn, roving, mat, milled fiber, chopped strand, woven roving & rubber reinforcements)

SUPERIOR GLASS FIBERS, INC.

EXECUTIVE OFFICE: P.O. Box 89, Bremen, OH 43107
PLANT: Bremen, OH (mat)

TABLE 2:
LOCATION OF AMERICAN FIBER PRODUCT-MANUFACTURING PLANTS

STATES & AREA	ARTIFICIAL (CELLULOSIC) [a]	SYNTHETIC (NONCELLULOSIC)						GLASS FIBER	GRAND TOTAL
		ACRYLIC [b]	NYLON [c]	OLEFIN	POLYESTER	OTHER [d]	TOTAL		
NEW ENGLAND									
CONNECTICUT				1			1		1
MAINE				1			1		1
MASSACHUSETTS				4	1	1	6		6
RHODE ISLAND				2			2		2
VERMONT			1	1	1		3		3
TOTAL NEW ENGLAND			**1**	**9**	**2**	**1**	**13**		**13**
MID-ATLANTIC									
DELAWARE			1				1		1
MARYLAND			1	1	1	1	4		4
NEW JERSEY				1	2		3		3
NEW YORK			2	2		1	5	1	6
PENNSYLVANIA					1		1	1	2
TOTAL MID-ATLANTIC			**4**	**4**	**4**	**2**	**14**	**2**	**16**
PIEDMONT									
N. CAROLINA			3	12	9	2	26	2	28
S. CAROLINA	1	1	11	9	10	1	32	3	36
VIRGINIA	1	2	7	4	2	2	17		18
WEST VIRGINIA			1		2		3		3
TOTAL PIEDMONT	**2**	**3**	**22**	**25**	**23**	**5**	**78**	**5**	**85**
SOUTH									
ALABAMA	1	2	2	5	1		10		11
FLORIDA		1	2	2			5	1	6
GEORGIA			4	29	1		34		34
LOUISIANA				2			2		2
MISSISSIPPI				2			2		2
TENNESSEE	3		2	4	4		10	1	14
TEXAS								3	3
TOTAL SOUTH	**4**	**3**	**10**	**44**	**6**		**63**	**5**	**72**
MID-WEST & WEST									
CALIFORNIA				2			2	1	3
IOWA			1	1			2		2
KANSAS				1			1		1
MICHIGAN				1			1		1
MINNESOTA				1			1		1
OHIO				1			1	3	4
OREGON				1			1		1
UTAH				3			3		3
WASHINGTON				1			1		1
WISCONSIN				1			1		1
TOTAL MIDWEST & WEST			**1**	**13**			**14**	**4**	**18**
TOTAL NUMBER OF PLANTS	**6**	**6**	**38**	**95**	**35**	**8**	**182**	**16**	**204**
TOTAL NUMBER OF STATES	**4**	**4**	**13**	**27**	**12**	**6**	**30**	**9**	**31**

a. Artificial (Cellulosic) includes rayon, acetate and triacetate.
b. Acrylic includes modacrylic.
c. Nylon includes 1 aramid.
d. Other includes 1 fluorocarbon, 1 PBI, 1 polycarbonate, 1 saran, 3 spandex and 1 sulfar.

TABLE 3:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	0	0	6	1	4	0	139	0	37				187	
BRAZIL	53	110	55	0	54	76	22	53	53				476	
CANADA	745	619	686	613	656	532	399	634	533				5417	
CHILE	44	22	22	22	22	44	48	0	44				268	
GERMANY, FED. REP. OF	784	515	697	452	436	362	521	928	784				5479	
IRELAND	37	0	36	138	34	36	107	69	104				561	
JAPAN	55	121	122	185	110	206	57	81	72				1009	
KOREA, REP. OF	66	22	0	56	0	22	11	3	0				180	
MEXICO	156	99	171	45	153	144	213	141	169				1291	
NETHERLANDS	61	239	261	173	204	380	262	413	302				2295	
UNITED KINGDOM	75	68	113	135	75	66	84	40	71				727	
ALL OTHER COUNTRIES [a]	40	24	30	8	168	62	363	79	232				1006	
TOTAL ARTIFICIAL YARN	**2116**	**1839**	**2199**	**1828**	**1916**	**1930**	**2226**	**2441**	**2401**				**18896**	**12465**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	323	422	377	226	381	430	394	568	39				3160	
CANADA	4757	1990	4093	3462	3409	2370	1638	4140	3000				28859	
CHINA, PRC	104	0	369	0	752	0	110	0	0				1335	
GERMANY, DEM. REP.	0	0	95	43	82	80	44	0	0				344	
GERMANY, FED. REP. OF	68	67	95	116	124	142	208	179	236				1235	
JAPAN	150	521	422	263	107	60	84	61	174				1842	
SWITZERLAND	9	25	41	37	65	40	286	7	14				524	
TAIWAN	28	0	28	88	320	0	264	176	0				904	
UNITED KINGDOM	265	225	1	47	69	42	67	135	130				981	
ALL OTHER COUNTRIES [b]	273	241	123	138	111	255	42	261	126				1570	
TOTAL ARTIFICIAL STAPLE+TOW	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**				**40754**	**13472**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	30	46	0	11	38	1479	1	959				2564	
BELGIUM	0	56	115	171	343	236	568	685	399				2573	
BRAZIL	106	63	170	30	140	201	57	191	92				1050	
CANADA	3437	2926	2969	2399	3327	3304	2445	3580	3717				28104	
COSTA RICA	252	487	591	433	415	517	537	515	657				4404	
ECUADOR	91	26	144	0	58	23	71	33	33				479	
FRANCE	1180	1151	1079	1159	1159	1085	972	799	516				9100	
GERMANY, FED. REP. OF	2231	2204	2641	2514	2357	3691	2202	1988	2515				22343	
ISRAEL	299	217	172	149	285	244	117	124	103				1710	
ITALY	924	323	873	859	1031	132	489	526	620				5777	
JAPAN	469	610	568	609	548	502	845	1110	960				6221	
KOREA, REP. OF	10	49	7	81	98	42	89	0	59				435	
MEXICO	1447	2222	2385	1857	2527	2911	2490	2806	2210				20855	
NETHERLANDS	68	193	267	338	69	63	398	104	7				1507	
SINGAPORE	0	25	0	33	0	33	16	16	16				139	
TAIWAN	50	175	650	1296	2844	3217	3133	2680	1259				15304	
THAILAND	65	64	69	67	63	171	124	142	70				835	
UNITED KINGDOM	1482	1357	1409	1649	1790	1506	1635	2014	1437				14279	
ALL OTHER COUNTRIES [c]	36	175	221	260	67	330	189	324	443				2045	
TOTAL SYNTHETIC YARN	**12147**	**12353**	**14376**	**13904**	**17132**	**18246**	**17856**	**17638**	**16072**				**139724**	**88141**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	3	9	13	1	0	79	0	11				116	
AUSTRALIA	31	160	1	82	16	43	149	78	0				560	
BELGIUM	47	99	60	56	67	7	7	378	35				756	
CANADA	1413	737	1481	1489	1292	874	622	818	1242				9968	
FRANCE	230	304	253	405	388	336	136	519	102				2673	
GERMANY, FED. REP. OF	1985	[illegible]	1318	1293	1491	1780	1084	2057	753				13519	
INDIA	0	0	3772	3400	709	49	1772	2893	3690				16285	
IRELAND	280	480	305	348	0	36	0	0	0				1449	
ITALY	482	394	206	46	61	34	70	193	264				1750	
JAPAN	1773	1757	2303	2770	2429	1826	1929	2894	1648				19329	
KOREA, REP. OF	2297	3387	3933	4165	5687	4876	4806	2638	3190				34979	
MEXICO	1049	372	420	1016	783	462	579	797	434				5912	
NETHERLANDS	31	103	99	81	56	105	21	617	365				1478	
SPAIN	8	0	178	39	65	128	0	0	0				418	
SWITZERLAND	146	165	134	166	125	42	242	214	88				1322	
TAIWAN	262	235	215	808	917	2057	2093	1994	4020				12601	
TURKEY	18	0	0	0	111	37	90	105	0				361	
UNITED KINGDOM	2318	2304	1643	2107	2671	1229	1645	810	1535				16262	
ALL OTHER COUNTRIES [d]	2	53	45	56	29	28	0	241	111				565	
TOTAL SYNTHETIC STAPLE+TOW	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**				**140303**	**148065**

a. Belgium 617, Italy 110, Taiwan 68, China, PRC 51, France 43, Greece 41, Norway 32, Singapore 23, Egypt 21.

b. Poland 275, Australia 217, Italy 193, Romania 175, Korea Rep. of 171, France 121, Finland 116, Sweden 115, Belgium 73, Spain 47, Peru 37, India 18, Thailand 11, Mexico 1.

c. Ireland 493, Portugal 340, Egypt 258, Turkey 195, Austria 117, Peru 99, Romania 86, China, PRC 82, Spain 69, Switzerland 65, Australia 49, El Salvador 35, Nigeria 35, Morocco 26, Hong Kong 24, Colombia 21, Honduras 20, Sweden 12, Greece 10, Denmark 9.

d. Romania 201, Israel 169, Hong Kong 92, Brazil 59, Germany, Dem. Rep. 42, China, PRC 2.

Effective January 1, 1989 the U.S. Manufactured Imports for Consumption by Country of Origin are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering cellulosic (artificial) and noncellulosic (synthetic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

Selected U.S. Manufactured Imports for Consumption by Country of Origin for 1988 are published in the ***Textile Organon***, February 1989 issue, page 31.

TABLE 4:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

	1989												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	114	266	408	205	111	192	176	252	148				1872	
TEXTURED	180	1	0	24	0	27	497	58	275				1062	
OTHER	1726	1532	1671	1449	1732	1673	1402	2036	1873				15094	
MONOFILAMENTS & STRIPS	96	40	120	150	73	38	151	95	105				868	
SUBTOTAL ABOVE	**2116**	**1839**	**2199**	**1828**	**1916**	**1930**	**2226**	**2441**	**2401**				**18896**	**12465**
STAPLE	5924	3481	5624	4403	5312	3419	3113	5451	3512				40239	
TOW	47	0	0	7	103	0	24	72	207				460	
TOPS	6	10	20	10	5	0	0	4	0				55	
SUBTOTAL ABOVE	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**				**40754**	**13472**
WASTE	**18**	**122**	**47**	**213**	**0**	**0**	**0**	**94**	**44**				**538**	**5**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1037	1093	1506	1578	1829	1964	1480	1706	1698				13891	
TEXTURED														
UP TO 450 DENIER	385	217	359	285	319	315	333	428	270				2911	
OVER 450 DENIER	1311	1054	1428	1294	1241	654	943	865	1164				9954	
OTHER	3820	3306	3786	3845	4296	5210	4007	4096	3664				36030	
MONOFILAMENTS & STRIPS	72	159	58	113	143	116	120	63	89				933	
SUBTOTAL ABOVE	**6625**	**5829**	**7137**	**7115**	**7828**	**8259**	**6883**	**7158**	**6885**				**63719**	**28991**
POLYESTER														
HIGH TENACITY	957	880	909	488	797	703	361	603	557				6255	
TEXTURED	883	1673	1738	1766	1775	2385	1747	2230	1822				16019	
POY	0	40	642	1088	2744	3214	3170	2407	989				14294	
OTHER	1152	1481	1719	1740	1324	1567	1551	1815	1487				13836	
MONOFILAMENTS & STRIPS	65	80	34	55	24	70	73	65	171				637	
SUBTOTAL ABOVE	**3057**	**4154**	**5042**	**5137**	**6664**	**7939**	**6902**	**7120**	**5026**				**51041**	**27347**
OTHER SYNTHETIC FILAMENT														
TEXTURED	2057	1685	1550	1054	2074	1555	1199	1981	1981				15136	
OTHER	261	386	339	274	171	136	1049	1015	944				4575	
MONOFILAMENTS & STRIPS	147	299	308	324	395	357	1823	364	1236				5253	
SUBTOTAL ABOVE	**2465**	**2370**	**2197**	**1652**	**2640**	**2048**	**4071**	**3360**	**4161**				**24964**	**31803**
STAPLE														
NYLON	1726	1896	1845	1592	1422	1273	1445	1611	1396				14206	
POLYESTER	5584	5594	10047	10627	10327	8674	9941	11597	12729				85120	
ACRYLIC	1934	1028	1576	1518	1206	1511	1335	2194	839				13141	
POLYPROPYLENE	44	55	197	351	93	220	298	55	150				1463	
OTHER	172	1040	651	740	167	165	259	245	83				3522	
TOW														
NYLON	237	433	257	504	341	315	225	524	221				3057	
POLYESTER	47	78	131	49	140	114	31	32	203				825	
ACRYLIC	2023	1709	1127	2522	2868	1462	1574	837	1751				15873	
OTHER	117	120	146	0	0	14	0	15	0				412	
TOPS	488	358	398	437	334	201	216	136	116				2684	
SUBTOTAL ABOVE	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**				**140303**	**148065**
WASTE														
NYLON	1971	1804	1754	2087	1949	2027	1769	2266	1265				16892	
POLYESTER	999	340	730	1029	846	973	1475	2106	1821				10319	
OTHER	396	725	477	486	547	389	326	675	897				4918	
TOTAL MANUFACTURED FIBERS ABOVE	**35996**	**32985**	**41602**	**42307**	**44708**	**40933**	**42113**	**47993**	**43707**				**372344**	**293149**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	229	84	46	26	74	73	105	171	124				932	
SPUN YARN	492	396	370	287	418	406	466	798	368				4001	
SPUN YARNS														
SYNTHETIC	517	686	517	258	677	1019	937	801	902				6314	
ARTIFICIAL	0	0	0	0	0	0	0	0	0				0	
PUT UP FOR RETAIL SALE	71	50	27	37	74	39	128	63	21				510	
GRAND TOTAL ABOVE	**37305**	**34201**	**42562**	**42915**	**45951**	**42470**	**43749**	**49826**	**45122**				**384101**	**351883**

SOURCE: U.S. Census Bureau Report IM145X.

Effective January 1,1989 the U.S. Imports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering cellulosic (artificial) and noncellulosic (synthetic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Imports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 32.

TABLE 5:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

	1989												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	9	13	45	26	30	16	74	117	78				408	
TEXTURED	463	17	29	1	29	28	1009	26	26				1628	
OTHER	694	63	18	60	21	15	51	30	6				958	
MONOFILAMENTS & STRIPS	90	0	7	93	5	9	21	12	2				239	
SUBTOTAL ABOVE	**1256**	**93**	**99**	**180**	**85**	**68**	**1155**	**185**	**112**				**3233**	**10014**
STAPLE	2827	1786	1325	920	1659	1786	2084	2167	1495				16049	
TOPS	94	0	8	129	53	48	7	101	133				573	
SUBTOTAL ABOVE	**2921**	**1786**	**1333**	**1049**	**1712**	**1834**	**2091**	**2268**	**1628**				**16622**	**18914**
WASTE	**1303**	**559**	**1587**	**1116**	**1635**	**1108**	**1021**	**551**	**491**				**9371**	**1730**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	9331	9410	7884	16614	6326	6999	11613	7987	7577				83741	
TEXTURED														
UP TO 450 DENIER	522	586	719	666	819	1271	488	856	954				6881	
OVER 450 DENIER	4706	5051	5459	4430	4096	3626	3176	4030	3042				37616	
OTHER	2038	2103	2133	2188	2571	2003	1669	2028	1758				18491	
MONOFILAMENTS & STRIPS	239	258	187	131	204	303	282	134	27				1765	
SUBTOTAL ABOVE	**16836**	**17408**	**16382**	**24029**	**14016**	**14202**	**17228**	**15035**	**13358**				**148494**	**122478**
POLYESTER														
HIGH TENACITY	3031	3122	2773	3282	4214	4080	3334	3490	2679				30005	
TEXTURED	3651	3677	2385	2939	3208	3577	1341	2557	2583				25918	
POY	939	1250	2204	1446	629	528	2782	289	655				10722	
OTHER	1007	584	829	983	777	1186	933	722	975				7996	
MONOFILAMENTS & STRIPS	208	213	203	132	302	332	275	346	353				2364	
SUBTOTAL ABOVE	**8836**	**8846**	**8394**	**8782**	**9130**	**9703**	**8665**	**7404**	**7245**				**77005**	**67212**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1033	457	872	903	992	634	980	995	603				7469	
OTHER	1342	1471	1735	1730	1559	1332	1724	1527	1938				14358	
MONOFILAMENTS & STRIPS	486	421	771	1317	927	987	687	860	675				7131	
SUBTOTAL ABOVE	**2861**	**2349**	**3378**	**3950**	**3478**	**2953**	**3391**	**3382**	**3216**				**28958**	**33733**
STAPLE														
NYLON	2605	3265	3262	2629	3280	3985	2532	1797	2075				25430	
POLYESTER	14048	10762	12940	12923	10675	7497	8203	8432	6815				92295	
ACRYLIC	3326	5674	6643	6896	6342	9369	8569	6419	4571				57809	
POLYPROPYLENE	1336	1569	1129	2264	2714	2477	1995	1454	8124				23062	
OTHER	836	2036	1489	2562	1734	1757	2004	1412	2180				16010	
TOW														
NYLON	31	50	50	108	141	86	56	61	32				615	
POLYESTER	37	564	472	634	7	621	541	113	319				3308	
ACRYLIC	1037	1761	2185	3302	1467	829	1070	899	1013				13563	
OTHER	161	16	34	503	9	7	77	13	213				1033	
TOPS	847	964	1224	2191	3092	1230	1557	3000	2448				16553	
SUBTOTAL ABOVE	**24264**	**26661**	**29428**	**34012**	**29461**	**27858**	**26604**	**23600**	**27790**				**249678**	**300795**
WASTE														
NYLON	2127	2118	2159	2883	2102	2007	1852	2750	2640				20638	
POLYESTER	4369	3980	3189	5535	3685	2726	3631	2444	3115				32674	
OTHER	5113	6957	8080	6731	7071	5876	8304	5850	3966				57948	
TOTAL MANUFACTURED FIBERS ABOVE	**69886**	**70757**	**74029**	**88267**	**72375**	**68335**	**73942**	**63469**	**63561**				**644621**	**661555**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	13	51	43	74	9	93	41	77	46				447	
SPUN YARN	0	0	0	0	0	0	0	0	0				0	
SPUN YARNS														
SYNTHETIC	732	959	1152	1172	1944	1089	856	1532	1452				10888	
ARTIFICIAL	0	0	0	0	0	0	0	0	2				2	
PUT UP FOR RETAIL SALE	606	740	923	580	532	435	536	704	521				5577	
GRAND TOTAL ABOVE	**71237**	**72507**	**76147**	**90093**	**74860**	**69952**	**75375**	**65782**	**65582**				**661535**	

SOURCE: U.S. Census Bureau Report EM522.

Effective January 1,1989 the U.S. Exports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering cellulosic (artificial) and noncellulosic (synthetic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Exports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 33.

TABLE 6:
QUARTERLY MANUFACTURED FIBER DATA

MILLION POUNDS

ITEM	1987					1988					1989				
	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
						YARN+MONOFILAMENTS									
CELLULOSIC YARN [d]															
PRODUCTION	**46.2**	**46.7**	**45.2**	**53.0**	**191.1**	**49.1**	**54.4**	**54.9**	**55.5**	**213.9**	**52.7**	**55.8**	**56.7**		
SHIPMENTS - DOMESTIC	39.2	43.6	40.2	43.8	166.8	41.4	47.3	45.8	48.1	182.6	46.0	50.3	45.6		
- EXPORT	5.0	5.9	6.1	7.9	24.9	8.7	7.9	10.0	7.5	34.1	6.8	7.9	8.4		
TOTAL SHIPMENTS	**44.2**	**49.5**	**46.3**	**51.7**	**191.7**	**50.1**	**55.2**	**55.8**	**55.6**	**216.7**	**52.8**	**58.2**	**54.0**		
ENDING STOCK	**16.8**	**14.0**	**12.9**	**14.2**		**13.2**	**12.4**	**11.5**	**11.4**		**11.3**	**8.9**	**11.6**		
IMPORTS	3.0	2.5	2.7	4.4	12.6	4.0	4.0	4.4	5.2	17.6	6.2	5.7	7.1		
TOTAL AVAILABLE	**42.2**	**46.1**	**42.9**	**48.2**	**179.4**	**45.4**	**51.3**	**50.2**	**53.3**	**200.2**	**52.2**	**56.0**	**52.7**		
NYLON															
PRODUCTION	**414.1**	**427.5**	**432.9**	**422.7**	**1697.2**	**431.7**	**440.0**	**428.8**	**427.0**	**1727.5**	**436.9**	**447.5**	**434.8**		
SHIPMENTS - DOMESTIC	389.3	394.8	405.8	364.4	1554.3	387.8	395.4	391.1	398.1	1572.4	387.9	399.7	400.9		
- EXPORT	32.1	37.9	33.7	35.8	139.5	39.6	38.1	41.5	46.8	166.0	42.7	38.9	34.8		
TOTAL SHIPMENTS	**421.4**	**432.7**	**439.5**	**400.2**	**1693.8**	**427.4**	**433.5**	**432.6**	**444.9**	**1738.4**	**430.6**	**438.6**	**435.7**		
ENDING STOCK	**125.5**	**120.3**	**113.7**	**136.2**		**140.5**	**147.0**	**143.2**	**125.3**		**131.6**	**140.5**	**139.6**		
OLEFIN [a]															
PRODUCTION	**255.8**	**283.9**	**287.4**	**306.7**	**1133.8**	**307.6**	**313.8**	**296.6**	**306.1**	**1224.1**	**313.8**	**324.5**	**308.0**		
SHIPMENTS - DOMESTIC	261.5	281.8	287.5	304.7	1135.5	303.5	307.7	288.8	299.8	1199.8	308.0	315.5	301.6		
- EXPORT	2.7	1.7	1.8	2.1	8.3	2.7	5.9	6.0	5.2	19.8	5.2	6.3	4.8		
TOTAL SHIPMENTS	**264.2**	**283.5**	**289.3**	**306.8**	**1143.8**	**306.2**	**313.6**	**294.8**	**305.0**	**1219.6**	**313.2**	**321.8**	**306.4**		
ENDING STOCK	**54.5**	**54.9**	**53.0**	**52.9**		**54.3**	**54.5**	**56.3**	**57.4**		**58.0**	**60.7**	**62.3**		
POLYESTER															
PRODUCTION	**287.7**	**303.3**	**293.9**	**293.8**	**1178.7**	**284.5**	**313.5**	**304.6**	**326.1**	**1228.7**	**314.4**	**325.3**	**307.4**		
SHIPMENTS - DOMESTIC	266.8	285.2	280.8	280.6	1113.4	266.7	291.9	278.2	320.6	1157.4	292.0	303.6	265.1		
- EXPORT	16.4	18.4	15.8	16.3	66.9	18.8	17.8	16.7	21.4	74.7	15.9	13.1	13.3		
TOTAL SHIPMENTS	**283.2**	**303.6**	**296.6**	**296.9**	**1180.3**	**285.5**	**309.7**	**294.9**	**342.0**	**1232.1**	**307.9**	**316.7**	**278.4**		
ENDING STOCk	**115.4**	**115.1**	**112.4**	**109.3**		**108.3**	**112.1**	**121.8**	**105.9**		**112.4**	**121.0**	**150.0**		
TOTAL NONCELLULOSIC ABOVE															
PRODUCTION	**957.6**	**1014.7**	**1014.2**	**1023.2**	**4009.7**	**1023.8**	**1067.3**	**1030.0**	**1059.2**	**4180.3**	**1065.1**	**1097.3**	**1050.2**		
SHIPMENTS - DOMESTIC	917.6	961.8	974.1	949.7	3803.2	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	967.6		
- EXPORT	51.2	58.0	51.3	54.2	214.7	61.1	61.8	64.2	73.4	260.5	63.8	58.3	52.9		
SHIPMENTS	**968.8**	**1019.8**	**1025.4**	**1003.9**	**4017.9**	**1019.1**	**1056.8**	**1022.3**	**1091.9**	**4190.1**	**1051.7**	**1077.1**	**1020.5**		
ENDING STOCK	**295.4**	**290.3**	**279.1**	**298.4**		**303.1**	**313.6**	**321.3**	**288.6**		**302.0**	**322.2**	**351.9**		
DOMESTIC SHIPMENTS	917.6	961.8	974.1	949.7	3803.2	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	967.6		
IMPORTS -TEXTURED YARN [b]	19.3	15.1	17.2	16.9	68.5	15.7	14.7	16.1	14.1	60.6	14.3	14.7	15.0		
-OTHER YARN [b]	13.3	12.4	11.9	11.3	48.9	11.2	11.1	11.9	13.4	47.6	23.4	33.0	33.2		
-MONOFILAMENTS	0.8	0.9	1.0	1.1	3.8	1.8	2.3	2.0	2.0	8.1	1.2	1.6	3.4		
TOTAL IMPORTS	33.4	28.4	30.1	29.3	121.2	28.7	28.1	30.0	29.5	116.3	38.9	49.3	51.6		
TOTAL AVAILABLE	**951.0**	**990.2**	**1004.2**	**979.0**	**3924.4**	**986.7**	**1023.1**	**988.1**	**1048.0**	**4045.9**	**1026.8**	**1068.1**	**1019.2**		
						GLASS FIBER									
TOTAL SHIPMENTS	**366.1**	**392.5**	**383.3**	**371.2**	**1513.1**	**386.4**	**415.2**	**405.9**	**380.2**	**1587.7**	**394.2**	**407.3**	**370.4**		
IMPORTS	4.9	5.6	11.3	7.6	29.4	5.6	7.1	6.5	7.0	26.2	0.7	1.2	2.1		

FOOTNOTES FOR TABLE ABOVE & OPPOSITE:

"Imports" are imports for consumption, as reported by the U.S. Census Bureau.

a. Also include film fiber as well as spunbonded polypropylene.

b. Includes singles and plied.

c. For 1987-1988, these figures are composites of the nylon, acrylic+modacrylic and polyester staple imports, i.e., Commodity Numbers 309.4331, .4351,.4336 & .4361. For 1989, Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon.***

d. Includes both rayon & acetate yarn.

e. For 1987-1988, these figures are composites of olefin and other staple imports, i.e., Commodity Numbers 309.4371, .4341 & .4390. For 1989, Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon***.

f. 1987-1989 data exclude Vinyon.

TABLE 6:
QUARTERLY MANUFACTURED FIBER DATA *(Continued)*

MILLION POUNDS

ITEM	1987					1988					1989				
	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
						STAPLE+TOW									
RAYON															
PRODUCTION	**101.3**	**100.5**	**103.6**	**108.4**	**413.8**	**106.6**	**101.2**	**99.4**	**92.6**	**399.8**	**100.8**	**101.2**	**83.2**		
SHIPMENTS - DOMESTIC	91.8	91.0	97.9	102.4	383.1	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6		
- EXPORT	8.1	8.2	12.6	3.5	32.4	5.1	6.1	5.5	3.8	20.5	3.4	5.4	4.3		
TOTAL SHIPMENTS	**99.9**	**99.2**	**110.5**	**105.9**	**415.5**	**107.0**	**108.1**	**99.5**	**91.9**	**406.5**	**103.1**	**97.1**	**80.9**		
ENDING STOCK	**23.8**	**25.1**	**18.2**	**20.7**		**20.3**	**13.4**	**13.3**	**14.0**		**11.7**	**15.8**	**18.1**		
DOMESTIC SHIPMENTS	91.8	91.0	97.9	102.4	383.1	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6		
IMPORTS FOR CONSUMPTION															
STAPLE	3.9	3.8	2.6	2.7	13.0	3.2	3.8	5.5	6.5	19.0	} 15.1	13.3	12.4		
GROUPED FILAMENTS	0.2	0.1	0.4	0.2	0.9	0.2	0.3	0.5	0.4	1.4					
TOTAL IMPORTS	4.1	3.9	3.0	2.9	13.9	3.4	4.1	6.0	6.9	20.4	15.1	13.3	12.4		
TOTAL AVAILABLE	**95.9**	**94.9**	**100.9**	**105.3**	**397.0**	**105.3**	**106.1**	**100.0**	**95.0**	**406.4**	**114.8**	**105.0**	**89.0**		
NYLON															
PRODUCTION	**247.4**	**261.0**	**252.8**	**231.2**	**992.4**	**231.5**	**235.9**	**226.6**	**247.7**	**941.7**	**253.0**	**242.0**	**241.0**		
SHIPMENTS-DOMESTIC	246.2	253.2	246.2	220.4	966.0	239.4	223.9	241.6	240.0	944.9	242.0	231.2	245.8		
-EXPORT	5.3	5.0	3.7	5.5	19.5	4.3	4.3	4.9	5.5	19.0	7.5	4.8	5.4		
TOTAL SHIPMENTS	**251.5**	**258.2**	**249.9**	**225.9**	**985.5**	**243.7**	**228.2**	**246.5**	**245.5**	**963.9**	**249.5**	**236.0**	**251.2**		
ENDING STOCK	**58.7**	**61.5**	**64.4**	**69.7**		**57.5**	**65.2**	**45.3**	**47.5**		**51.0**	**57.0**	**46.8**		
IMPORTS	14.8	8.7	8.6	6.9	39.0	4.9	5.1	5.4	6.5	21.9	6.2	5.4	5.4		
TOTAL AVAILABLE	**261.0**	**261.9**	**254.8**	**227.3**	**1005.0**	**244.3**	**229.0**	**247.0**	**246.5**	**966.8**	**248.2**	**236.6**	**251.2**		
ACRYLIC+MODACRYLIC															
PRODUCTION	**155.7**	**159.0**	**135.3**	**141.5**	**591.5**	**148.8**	**150.9**	**141.5**	**146.9**	**588.1**	**144.3**	**145.6**	**129.4**		
SHIPMENTS-DOMESTIC	139.4	131.6	112.8	95.5	479.3	109.0	109.3	107.3	95.5	421.1	112.9	112.4	102.8		
-EXPORT	14.7	17.0	32.0	51.4	115.1	47.7	29.1	39.8	52.5	169.1	23.6	32.5	30.0		
TOTAL SHIPMENTS	**154.1**	**148.6**	**144.8**	**146.9**	**594.4**	**156.7**	**138.4**	**147.1**	**148.0**	**590.2**	**136.5**	**144.9**	**132.8**		
ENDING STOCK	**67.8**	**78.2**	**68.7**	**63.3**		**55.4**	**67.9**	**62.3**	**61.2**		**69.0**	**69.7**	**66.3**		
IMPORTS	3.3	4.1	4.6	3.7	15.7	3.3	4.4	3.3	4.3	15.3	9.4	11.1	8.5		
TOTAL AVAILABLE	**142.7**	**135.7**	**117.4**	**99.2**	**495.0**	**112.3**	**113.7**	**110.6**	**99.8**	**436.4**	**122.3**	**123.5**	**111.3**		
OLEFIN+VINYON [f]															
PRODUCTION	**85.5**	**92.3**	**92.1**	**90.6**	**360.5**	**94.3**	**94.5**	**85.9**	**89.3**	**364.0**	**97.2**	**97.7**	**92.0**		
SHIPMENTS-DOMESTIC	81.1	85.7	86.1	88.2	341.1	83.8	87.6	84.8	88.0	344.2	91.6	93.5	91.4		
-EXPORT	6.9	5.7	5.4	4.8	22.8	5.6	5.8	4.4	3.8	19.6	3.1	3.7	3.4		
TOTAL SHIPMENTS	**88.0**	**91.4**	**91.5**	**93.0**	**363.9**	**89.4**	**93.4**	**89.2**	**91.8**	**363.8**	**94.7**	**97.2**	**94.8**		
ENDING STOCK	**31.0**	**31.9**	**32.5**	**30.1**		**35.0**	**36.1**	**32.8**	**30.3**		**32.8**	**33.3**	**30.5**		
POLYESTER															
PRODUCTION	**581.0**	**596.2**	**578.4**	**606.2**	**2361.8**	**587.4**	**619.5**	**604.3**	**640.6**	**2451.8**	**609.4**	**648.8**	**591.0**		
SHIPMENTS-DOMESTIC	534.4	549.9	537.5	579.2	2201.0	558.3	572.5	551.2	629.8	2311.8	575.4	594.6	543.0		
-EXPORT	48.2	47.0	38.3	34.7	168.2	27.8	31.1	38.2	40.0	137.1	34.9	21.7	20.1		
TOTAL SHIPMENTS	**582.6**	**596.9**	**575.8**	**613.9**	**2369.2**	**586.1**	**603.6**	**589.4**	**669.8**	**2448.9**	**610.3**	**616.3**	**563.1**		
ENDING STOCK	**162.3**	**161.6**	**164.2**	**156.5**		**157.8**	**173.7**	**188.6**	**159.4**		**158.5**	**191.0**	**218.9**		
IMPORTS	15.5	17.4	23.4	14.4	70.7	15.0	20.7	22.3	15.2	73.2	21.5	29.9	34.5		
TOTAL AVAILABLE	**549.9**	**567.3**	**560.9**	**593.6**	**2271.7**	**573.3**	**593.2**	**573.5**	**645.0**	**2385.0**	**596.9**	**624.5**	**577.5**		
TOTAL NONCELLULOSIC															
PRODUCTION	**1069.6**	**1108.5**	**1058.6**	**1069.5**	**4306.2**	**1062.0**	**1100.8**	**1058.3**	**1124.5**	**4345.6**	**1103.9**	**1134.1**	**1053.4**		
SHIPMENTS-DOMESTIC	1001.1	1020.4	982.6	983.3	3987.4	990.5	993.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0		
-EXPORT	75.1	74.7	79.4	96.4	325.6	85.4	70.3	87.3	101.8	344.8	69.1	62.7	58.9		
TOTAL SHIPMENTS	**1076.2**	**1095.1**	**1062.0**	**1079.7**	**4313.0**	**1075.9**	**1063.6**	**1072.2**	**1155.1**	**4366.8**	**1091.0**	**1094.4**	**1041.9**		
ENDING STOCK	**319.8**	**333.2**	**329.8**	**319.6**		**305.7**	**342.9**	**329.0**	**298.4**		**311.3**	**351.0**	**362.5**		
DOMESTIC SHIPMENTS	1001.1	1020.4	982.6	983.3	3987.4	990.5	933.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0		
IMPORTS FOR CONSUMPTION															
3 FIBERS ABOVE [c]	33.6	30.2	36.6	25.0	125.4	23.2	30.2	31.0	26.0	110.4	37.1	46.4	48.4		
OTHER N.C. STAPLE [e]	2.8	3.6	3.7	3.4	13.5	5.6	5.7	4.3	4.2	19.8	} 4.0	2.8	1.7		
GROUPED FILAMENTS	12.4	12.4	12.1	13.1	50.0	14.5	17.8	15.7	17.8	65.8					
TOTAL IMPORTS	48.8	46.2	52.4	41.5	188.9	43.3	53.7	51.0	48.0	196.0	41.1	49.2	50.1		
TOTAL AVAILABLE	**1049.9**	**1066.6**	**1035.0**	**1024.8**	**4176.3**	**1033.8**	**1047.0**	**1035.9**	**1101.3**	**4218.0**	**1063.0**	**1080.9**	**1033.1**		

See footnotes on opposite page.

TABLE 7:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

	1989												YEAR TO DATE[a]	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	17.3	17.1	18.4	21.5	18.3	18.4	18.9	17.8	17.3	19.9			184.9	179.7
RAYON STAPLE	34.5	32.1	36.5	31.4	34.8	30.9	24.8	29.4	26.7	DATA NO LONGER AVAILABLE				
TOTAL ARTIFICIAL (CELLULOSIC)	**51.8**	**49.2**	**54.9**	**52.9**	**53.1**	**49.3**	**43.7**	**47.2**	**44.0**	**19.9**			**184.9**	**179.7**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	31.3	30.5	32.6	32.3	28.9	32.7	29.1	29.2	28.6	28.8			304.0	310.1
- CARPET	74.9	77.2	82.0	77.5	86.1	78.5	73.4	89.9	88.7	79.5			807.7	817.8
- TEXTILE[f]	33.9	33.2	35.0	34.6	33.8	34.2	31.8	32.3	32.7	33.1			334.6	316.2
POLYESTER - INDUSTRIAL[d]	28.6	29.7	30.9	32.2	30.4	32.8	29.8	32.5	29.2	30.3			306.4	299.8
- TEXTILE[f]	73.2	71.2	74.4	78.2	77.0	66.1	73.5	54.9	58.5	62.5			689.5	699.4
OLEFIN[e]	105.3	104.3	103.6	104.1	112.3	105.5	94.8	107.0	107.0	109.4			1053.3	1020.8
TOTAL YARN	**347.2**	**346.1**	**358.5**	**358.9**	**368.5**	**349.8**	**332.4**	**345.8**	**344.7**	**343.6**			**3495.5**	**3464.1**
STAPLE+TOW+FIBERFILL														
NYLON	82.3	78.4	88.8	76.4	81.3	78.3	74.9	90.8	85.5	85.9			822.6	808.0
ACRYLIC+MODACRYLIC	41.7	46.2	48.6	49.2	51.7	44.0	41.1	47.6	44.1	44.0			458.2	491.0
POLYESTER	205.8	192.1	212.4	214.3	208.1	193.9	182.3	198.8	182.0	200.4			1990.1	2007.4
OLEFIN	31.1	31.6	32.0	31.4	32.3	31.2	27.8	33.9	33.1	33.4			317.8	301.2
TOTAL STAPLE	**360.9**	**348.3**	**381.8**	**371.3**	**373.4**	**347.4**	**326.1**	**371.1**	**344.7**	**363.7**			**3588.7**	**3607.6**
TOTAL SYNTHETIC (NONCELLULOSIC)	**708.1**	**694.4**	**740.3**	**730.2**	**741.9**	**697.2**	**658.5**	**716.9**	**689.4**	**707.3**			**7084.2**	**7071.7**
TOTAL MANUFACTURED FIBER	**759.9**	**743.6**	**795.2**	**783.1**	**795.0**	**746.5**	**702.2**	**764.1**	**733.4**	**727.2**			**7269.1**	**7251.4**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	11.7	10.9	11.3	10.4	9.7	8.9	11.0	10.7	11.6	10.2			10.2	12.3
RAYON STAPLE	13.0	13.2	11.7	12.5	13.4	15.8	16.8	16.3	18.1	DATA NO LONGER AVAILABLE				
TOTAL ARTIFICIAL (CELLULOSIC)	**24.7**	**24.1**	**23.0**	**22.9**	**23.1**	**24.7**	**27.8**	**27.0**	**29.7**	**10.2**			**10.2**	**12.3**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.4	24.8	22.4	22.9	24.2	24.5	26.7	27.3	28.7	30.4			30.4	28.6
- CARPET	63.5	63.2	62.8	68.7	64.0	66.8	73.6	59.3	54.6	51.5			51.5	53.3
- TEXTILE[f]	47.1	48.3	46.4	47.0	47.4	49.2	52.7	54.1	56.3	55.3			55.3	52.9
POLYESTER - INDUSTRIAL[d]	35.0	31.4	30.6	31.6	30.9	31.9	33.9	32.3	33.2	33.9			33.9	30.7
- TEXTILE[f]	73.5	76.9	81.8	85.1	85.0	89.1	99.7	115.7	116.8	117.7			117.7	90.1
OLEFIN[e]	53.1	53.8	58.0	57.8	58.5	60.7	61.1	60.6	62.3	61.9			61.9	52.0
TOTAL YARN	**296.6**	**298.4**	**302.0**	**313.1**	**310.0**	**322.2**	**347.7**	**349.3**	**351.9**	**350.7**			**350.7**	**307.6**
STAPLE+TOW+FIBERFILL														
NYLON	51.8	52.9	51.0	57.5	57.5	57.0	59.1	46.9	46.8	48.8			48.8	39.9
ACRYLIC+MODACRYLIC	70.5	68.3	69.0	67.3	65.2	69.7	71.7	69.3	66.3	67.2			67.2	63.1
POLYESTER	163.5	163.8	158.5	164.4	176.2	191.0	226.5	233.6	218.9	219.7			219.7	177.5
OLEFIN	31.0	31.3	32.8	34.3	35.2	33.3	34.2	34.1	30.5	33.2			33.2	34.1
TOTAL STAPLE	**316.8**	**316.3**	**311.3**	**323.5**	**334.1**	**351.0**	**391.5**	**383.9**	**362.5**	**368.9**			**368.9**	**314.6**
TOTAL SYNTHETIC (NONCELLULOSIC)	**613.4**	**614.7**	**613.3**	**636.6**	**644.1**	**673.2**	**739.2**	**733.2**	**714.4**	**719.6**			**719.6**	**622.2**
TOTAL MANUFACTURED FIBER	**638.1**	**638.8**	**636.3**	**659.5**	**667.2**	**697.9**	**767.0**	**760.2**	**744.1**	**729.8**			**729.8**	**634.5**
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL	12.1	12.8	14.1	11.5	11.5	11.3	10.6	10.9					94.8	96.1
CARPET CLASS WOOL	0.8	1.4	1.5	1.6	1.6	1.3	1.2	1.5					10.9	10.9
TOTAL RAW WOOL	**12.9**	**14.2**	**15.6**	**13.1**	**13.1**	**12.6**	**11.8**	**12.4**					**105.7**	**107.0**
RAW COTTON	289.5	301.0	339.2	305.7	362.3	343.5	286.8	341.0	404.4				2973.4	2670.8

a. "Year to date" totals for stock, are the latest month's figures. **Data for Rayon staple no longer available.**

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

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FIBER ORGANON

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Volume 60, No. 12 ☐ December 1989
A publication of *Fiber Economics Bureau, Inc.*

Highlights

- Worldwide Natural Fiber Survey...begins on page 263.
- November 1989 Capacity Survey Analysis... begins on page 269.

SHIPMENTS:

In November, total manufactured fiber shipments reached 682 million pounds, 6% below the 727 million pounds shipped in October and 9% below the 747 million pounds shipped in November 1988.

November shipments of synthetic (noncellulosic) filament yarn fell 4% to 330 million pounds and staple+tow fell 8% to 336 million pounds.

Contributing to the decrease in shipments over the previous month were polyester industrial yarn down 13% or 4 million pounds, polyester textile yarn down 11% or 7 million pounds and olefin staple+tow down 3 million pounds or 10%.

Year-to-date domestic shipments of manufactured fiber are up slightly and exports are down 19%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1989 NOV	1989 OCT	% CHG 11/89 - 10/89	1988 NOV	% CHG 11/89 - 11/88	YEAR TO DATE[d] 1989	YEAR TO DATE[d] 1988	% CHG YTD 1989-1988
ARTIFICIAL (CELLULOSIC)								
YARN	14.8	19.9	-25.6	17.0	-12.9	199.7	196.7	+1.5
RAYON STAPLE[d]	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL ARTIFICIAL (CELL.)	**14.8**	**19.9**	**-25.6**	**17.0**	**-12.9**	**199.7**	**196.7**	**+1.5**
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	28.7	28.8	-0.3	33.7	-14.8	332.7	343.8	-3.2
- CARPET	78.7	79.5	-1.0	82.2	-4.3	886.7	900.0	-1.5
- TEXTILE[a]	32.9	33.1	-0.6	34.0	-3.2	367.5	350.2	+4.9
POLYESTER - INDUSTRIAL	26.4	30.3	-12.9	28.7	-8.0	332.8	328.5	+1.3
- TEXTILE[a]	55.6	62.5	-11.0	79.0	-29.6	745.1	778.4	-4.3
OLEFIN	108.1	109.4	-1.2	102.2	+5.8	1161.4	1123.0	+3.4
TOTAL YARN	**330.4**	**343.6**	**-3.8**	**359.8**	**-8.2**	**3825.9**	**3823.9**	**+0.1**
STAPLE+TOW+FIBERFILL								
NYLON	81.9	85.9	-4.7	77.9	+5.1	904.5	885.9	+2.1
ACRYLIC+MODACRYLIC	41.9	44.0	-4.8	50.1	-16.4	500.1	541.1	-7.6
POLYESTER	182.4	200.4	-9.0	209.0	-12.7	2172.5	2216.4	-2.0
OLEFIN	30.1	33.4	-9.9	33.0	-8.8	347.9	334.2	+4.1
TOTAL STAPLE	**336.3**	**363.7**	**-7.5**	**370.0**	**-9.1**	**3925.0**	**3977.6**	**-1.3**
TOTAL SYNTHETIC (NONCELL.)	**666.7**	**707.3**	**-5.7**	**729.8**	**-8.6**	**7750.9**	**7801.5**	**-0.6**
TOTAL MANUFACTURED FIBER	**681.5**	**727.2**	**-6.3**	**746.8**	**-8.7**	**7950.6**	**7998.2**	**-0.6**
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS[b]	645.2	687.4	-6.1	687.3	-6.1	7512.1	7457.5	+0.7
EXPORTS[c]	36.3	39.8	-8.8	59.5	-39.0	438.5	540.7	-18.9

NA No longer available

[a] Includes low denier industrial yarn.

[b] Includes olefin exports

[c] Excludes olefin exports.

[d] **Data for rayon staple no longer available.**

Fiber Organon

A Monthly Review
Formerly **Textile Organon**

December 1989

CONTENTS

Features

Worldwide Natural Fiber Survey 263 - 268
- Worldwide Production, Consumption, Export & Carryover of Raw Cotton 263
- Worldwide Raw Cotton Production by Producing Countries 264
- Worldwide Raw Cotton Consumption by Consuming Countries 265
- Supply and Distribution of Domestic & Foreign Raw Cotton in the U.S. 266
- U.S. Calendar Year Imports & Exports of Raw Cotton & Cotton Products 266
- U.S. Cotton Acreage & Yield 267
- Worldwide Raw Wool Production by Principal Producing Countries 267
- Supply & Demand of Wool in the U.S. 268

November 1989 Capacity Survey Analysis 269 - 273
- Graph 1: Apparel Fiber Production vs. Capacity 269
- U.S. Manufactured Fiber Production & Producing Capacity 270
- Synthetic (Noncellulosic) Fiber Capacity Detail 271
- Worldwide Manufactured Fiber Production & Producing Capacity 272
- Graph 2: Worldwide Manufactured Fiber Production 273
- Graph 3: Worldwide Manufactured Fiber Producing Capacity 273

Industry Regulars

Total U.S. Manufactured Fiber Shipments 261

Quarterly Manufactured Fiber Data 274 - 275
- Filament Yarn Domestic Shipments 274
- Staple+Tow Domestic Shipments 275

Monthly U.S. Manufactured Fiber Data 276 - 278
- Imports by Fiber 276
- Exports by Fiber 277
- Imports by Country of Origin 278

Selected U.S. Monthly Fiber Data 279

Annual Index Volume Sixty 280 - 284

FIBER ECONOMICS BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc.
101 Eisenhower Parkway
Roseland, NJ 07068
U.S.A.
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Facsimile: (201) 228-7598

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WORLDWIDE NATURAL FIBER SURVEY

For the season beginning August 1, 1988, worldwide production of cotton reached 85 million bales, a gain of 4% over the previous season. The two largest producers, the People's Republic of China and the United States, together account for 41% of the worldwide gain. Worldwide consumption at 84 million bales exceeded production by one million bales, reducing the carryover to the 1989 season.

Cotton production in the United States grew 4% during the 1988 season to reach 15 million bales. At that level, production exceeded consumption and exports by one million bales, increasing the carryover of raw cotton. Although the U.S. has a net export balance of raw cotton, there was a net import balance of cotton yarn and manufactured goods equal to 4 million bales in 1988.

In 1988, worldwide production of raw wool (greasy basis) grew 3% over the 1987 level to reach 7,337 million pounds. Australia with 29% of world wool production increased output by 64 million pounds. The remaining major wool producing nations which grow over half the world's supply increased output 94 million pounds. The major portion of the increase or 176 million pounds came from the "other" nations that account for only 17% of world wool production.

Raw wool production in the United States remained unchanged during the 1988 season at 88 million pounds.

TABLE 2:
WORLDWIDE PRODUCTION, CONSUMPTION, EXPORT & CARRYOVER OF RAW COTTON

MILLION BALES[a] & *PERCENT*

SEASON BEGINNING AUGUST 1	PRODUCTION[b]						CONSUMPTION[c]						EXPORT[d]						CARRYOVER[e]					
	TOTAL		U.S.A.		FOREIGN		TOTAL		U.S.A.		FOREIGN		TOTAL		U.S.A.		FOREIGN		TOTAL		U.S.A		FOREIGN	
	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%
1950-1954 f	38.4	100	14.0	37	24.4	63	37.2	100	9.3	25	27.9	75	12.4	100	4.0	32	8.4	68	17.0	100	5.4	32	11.6	68
1955-1959 f	43.9	100	12.9	30	31.0	70	44.2	100	8.7	20	35.5	80	14.7	100	5.1	35	9.6	65	22.7	100	10.9	48	11.8	52
1960-1964 f	48.7	100	14.9	31	33.8	69	47.4	100	8.7	18	38.7	82	16.6	100	5.0	30	11.6	70	21.7	100	9.3	43	12.4	57
1965-1969 f	52.3	100	10.6	20	41.7	80	54.0	100	8.9	17	45.1	83	17.4	100	3.6	21	13.8	79	26.7	100	11.3	42	15.4	58
1970-1974 f	60.9	100	11.8	19	49.1	81	58.8	100	7.5	13	51.3	87	20.0	100	4.5	23	15.5	77	23.0	100	4.3	19	18.7	81
1975-1979 f	59.7	100	11.8	20	47.9	80	62.1	100	6.7	11	55.4	89	19.8	100	5.8	29	14.0	71	26.5	100	4.3	16	22.2	84
1980-1984 f	70.6	100	11.9	17	58.7	83	67.0	100	5.6	8	61.4	92	20.1	100	6.1	30	14.0	70	23.5	100	4.6	20	18.9	80
1985-1989 f	79.3	100	13.0	17	66.3	83	82.8	100	7.4	8	75.4	92	24.6	100	5.9	24	18.7	76	36.9	100	6.1	17	30.8	83
1978	59.4	100	10.9	18	48.5	82	63.2	100	6.4	10	56.8	90	19.9	100	6.2	31	13.7	69	26.6	100	5.3	20	21.3	80
1979	64.6	100	14.6	23	50.0	77	65.1	100	6.5	10	58.6	90	23.2	100	9.2	40	14.0	60	23.3	100	4.0	17	19.3	83
1980	63.7	100	11.1	17	52.6	83	65.3	100	5.9	9	59.4	91	19.9	100	5.9	30	14.0	70	22.9	100	3.0	13	19.9	87
1981	69.1	100	15.6	23	53.5	77	65.1	100	5.3	8	59.8	92	21.0	100	6.6	31	14.4	69	21.1	100	2.7	13	18.4	87
1982	66.4	100	12.0	18	54.4	82	66.5	100	5.5	8	61.0	92	18.6	100	5.2	28	13.4	72	24.3	100	6.6	27	17.7	73
1983	65.7	100	7.8	12	57.9	88	68.2	100	5.9	9	62.3	91	20.0	100	6.8	34	13.2	66	25.3	100	7.9	31	17.4	69
1984	88.2	100	13.0	15	75.2	85	70.0	100	5.5	8	64.5	92	20.8	100	6.2	30	14.6	70	23.7	100	2.8	12	20.9	88
1985	80.1	100	13.4	17	66.7	83	76.3	100	6.4	8	69.9	92	20.5	100	2.0	10	18.5	90	42.7	100	4.1	10	38.6	90
1986	70.8	100	9.7	14	61.1	86	83.7	100	7.5	9	76.2	91	26.7	100	6.7	25	20.0	75	47.8	100	9.3	19	38.5	81
1987	81.2	100	14.8	18	66.4	82	83.4	100	7.7	9	75.7	91	23.8	100	6.6	28	17.2	72	33.3	100	5.8	17	27.5	83
1988 g	84.8	100	15.4	17	69.4	83	84.3	100	7.6	8	76.7	92	26.0	100	6.3	24	19.7	76	33.8	100	7.5	22	26.3	78
1989 g	79.7	100	11.8	17	67.9	83	86.5	100	7.7	8	78.8	92	26.2	100	7.8	30	18.4	70	27.0	100	3.9	14	23.1	86

SOURCE: International Cotton Advisory Committee.
For earlier years' data, see the October 1960 and 1969 ***Textile Organon*** issues, pages 167 & 176.

a. As 480-pound bales.
b. Refers to actual ginnings or pressings during the August-July crop year. In some countries, estimates of household consumption are included in production estimates. U.S. production also includes city crop. Note the U.S. production shown in the table on page 266 includes only the ginnings until the 1982 crop year.
c. Includes raw cotton consumed in spinning mills and other factories plus estimates of household consumption.
d. Means the export of domestically produced cotton.
e. Includes mill stocks, port stocks and stocks in transit, etc. U.S.A. means the carryover of U.S. cotton in the world regardless of where located; FOREIGN means the carryover of foreign cotton in the world regardless of where located.
f. Five-year averages.
g. The 1988 & 1989 data are preliminary or estimated.

TABLE 3:
WORLDWIDE RAW COTTON PRODUCTION BY PRODUCING COUNTRIES[a]
THOUSAND BALES & *PERCENT*

SEASON BEGINNING AUGUST 1	WORLD TOTAL		NORTH & SOUTH AMERICA												CHINA PRC & E. EUROPE					
			BRAZIL		MEXICO		U.S.A.		OTHER N.A.[b]		OTHER S.A.[c]		TOTAL		CHINA[d]		U.S.S.R.[e]		TOTAL	
	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%
1950-1954	38403	100	1666	4.3	1340	3.5	14046	36.6	179	0.5	1170	3.0	18401	47.9	4480	11.6	5951	15.5	10431	27.1
1955-1959	43898	100	1490	3.4	2049	4.7	12945	29.5	423	1.0	1321	3.0	18228	41.6	7260	16.5	6937	15.8	14197	32.3
1960-1964	48651	100	2218	4.6	2189	4.5	14861	30.5	930	1.9	1637	3.4	21835	44.9	5277	10.8	7536	15.5	12813	26.3
1965-1969	52295	100	2668	5.1	2202	4.2	10573	20.2	1044	2.0	1558	3.0	18045	34.5	8218	15.7	9253	17.7	17471	33.4
1970-1974	60905	100	2745	4.5	1726	2.8	11777	19.3	1274	2.1	1852	3.1	19374	31.8	10448	17.2	11311	18.6	21759	35.8
1975-1979	59711	100	2364	4.0	1328	2.2	11751	19.7	1458	2.4	2208	3.7	19109	32.0	10033	16.8	11947	20.0	21980	36.8
1980-1984	70637	100	3165	4.5	1210	1.7	11897	16.8	899	1.3	2006	2.8	19177	27.1	18675	26.4	11209	15.9	29884	42.3
1985-1989	79341	100	3509	4.3	986	1.2	13034	16.4	454	0.6	2780	3.5	20763	26.0	18621	23.5	12283	15.5	30904	39.0
1978	59446	100	2623	4.4	1563	2.6	10856	18.3	1654	2.8	2093	3.5	18789	31.6	9968	16.8	11752	19.8	21720	36.6
1979	64642	100	2650	4.1	1509	2.3	14629	22.6	1139	1.8	2218	3.4	22145	34.2	10145	15.7	12132	18.8	22277	34.5
1980	63741	100	2862	4.5	1620	2.6	11122	17.4	1189	1.9	2001	3.1	18794	29.5	12429	19.5	12302	19.3	24731	38.8
1981	69125	100	2941	4.3	1440	2.1	15646	22.6	911	1.3	2076	3.0	23014	33.3	13779	19.9	11309	16.4	25088	36.3
1982	66436	100	2976	4.5	840	1.3	11963	18.0	805	1.2	1329	2.0	17913	27.0	16695	25.1	10427	15.7	27122	40.8
1983	65684	100	2615	4.0	1038	1.6	7771	11.8	811	1.2	1955	3.0	14190	21.6	21508	32.7	10028	15.3	31536	48.0
1984	88199	100	4431	5.0	1110	1.3	12982	14.7	777	0.9	2669	3.0	21969	24.9	28966	32.8	11977	13.6	40943	46.4
1985	80114	100	3644	4.5	1010	1.3	13432	16.8	586	0.7	2177	2.7	20849	26.0	19288	24.1	12823	16.0	32111	40.1
1986	70822	100	2909	4.1	638	0.9	9731	13.8	439	0.6	1926	2.7	15643	22.1	16516	23.3	12274	17.3	28790	40.6
1987	81215	100	3968	4.8	1025	1.3	14760	18.2	466	0.6	3456	4.3	23675	29.2	19520	24.0	11387	14.0	30907	38.0
1988 f	84829	100	3244	3.7	1417	1.7	15412	18.2	397	0.5	3056	3.6	23526	27.7	19113	22.5	13573	16.0	32686	38.5
1989 f	79725	100	3780	4.7	838	1.1	11834	14.8	381	0.5	3286	4.1	20119	25.2	18669	23.4	11356	14.2	30025	37.6

SEASON BEGINNING AUGUST 1	WEST EUROPE TOTAL[g]		ASIA & OCEANIA										AFRICA							
			INDIA		PAKISTAN		TURKEY		OTHER[h]		TOTAL		EGYPT		SUDAN		OTHER[i]		TOTAL	
	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%
1950-1954	230	0.6	3432	8.9	1330	3.5	642	1.7	727	1.9	6131	16.0	1713	4.5	387	1.0	1110	2.9	3210	8.4
1955-1959	525	1.2	4012	9.1	1381	3.2	763	1.7	1114	2.6	7270	16.6	1815	4.1	499	1.1	1364	3.1	3678	8.3
1960-1964	828	1.7	4769	9.8	1663	3.4	1118	2.3	1467	3.0	9017	18.5	2043	4.2	690	1.4	1425	3.0	4158	8.6
1965-1969	761	1.5	4850	9.3	2268	4.3	1787	3.4	1791	3.4	10696	20.4	2196	4.2	942	1.8	2184	4.2	5322	10.2
1970-1974	791	1.3	5410	8.9	2993	4.9	2379	3.9	2311	3.8	13093	21.5	2259	3.7	1051	1.7	2578	4.2	5888	9.6
1975-1979	789	1.3	5700	9.5	2536	4.3	2291	3.9	2288	3.8	12815	21.5	1928	3.2	660	1.1	2430	4.1	5018	8.4
1980-1984	821	1.2	6619	9.4	3480	4.9	2369	3.3	2808	4.0	15276	21.6	2110	3.0	817	1.2	2554	3.6	5480	7.8
1985-1989	1332	1.7	8021	10.1	6328	8.0	2608	3.3	3026	3.8	19983	25.2	1715	2.2	710	0.9	3934	5.0	6360	8.1
1978	848	1.4	6191	10.4	2176	3.7	2191	3.7	2390	4.0	12948	21.8	2014	3.4	637	1.0	2490	4.2	5141	8.6
1979	654	1.0	6260	9.7	3344	5.2	2191	3.4	2422	3.7	14217	22.0	2221	3.5	523	0.8	2605	4.0	5349	8.3
1980	821	1.3	6256	9.8	3281	5.1	2297	3.6	2271	3.6	14105	22.1	2428	3.8	446	0.7	2416	3.8	5290	8.3
1981	878	1.3	6559	9.5	3435	5.0	2242	3.2	2729	3.9	14965	21.6	2293	3.3	712	1.0	2175	3.2	5180	7.5
1982	715	1.1	6481	9.7	3783	5.7	2246	3.4	2711	4.1	15221	22.9	2115	3.2	959	1.4	2391	3.6	5465	8.2
1983	780	1.2	5870	8.9	2271	3.5	2398	3.7	2979	4.5	13518	20.6	1879	2.9	1034	1.5	2747	4.2	5660	8.6
1984	910	1.0	7927	9.0	4631	5.3	2664	3.0	3349	3.8	18571	21.1	1833	2.1	933	1.1	3040	3.4	5806	6.6
1985	1078	1.3	8979	11.2	5587	7.0	2379	3.0	3486	4.4	20431	25.6	1999	2.5	652	0.8	2994	3.7	5645	7.0
1986	1331	1.9	7418	10.5	6061	8.5	2379	3.4	3042	4.3	18900	26.7	1850	2.6	757	1.1	3551	5.0	6158	8.7
1987	1167	1.4	7105	8.7	6686	8.2	2465	3.0	2997	3.7	19253	23.6	1615	2.0	622	0.9	3976	4.9	6213	7.8
1988 f	1585	1.9	8120	9.6	6405	7.6	2967	3.5	2328	2.7	19820	23.4	1426	1.7	747	0.9	5039	5.9	7212	8.5
1989 f	1498	1.9	8484	10.6	6900	8.7	2850	3.6	3278	4.1	21512	27.0	1685	2.1	774	1.0	4112	5.2	6571	8.3

SOURCE: International Cotton Advisory Committee.

a. Bales expressed as 480 pound net weight.

b. Baleages are principally from El Salvador, Guatemala & Nicaragua.

c. Baleages are principally from Argentina, Colombia, Paraguay & Peru.

d. Figures include nominal baleages for North Korea & Vietnam.

e. Figures include nominal baleages for Albania, Bulgaria & Yugoslavia.

f. Data are preliminary.

g. Baleages are principally from Greece & Spain.

h. Baleages are chiefly from Australia, Iran, Israel & Syria.

i. Burkina Faso, Ivory Coast, Mali, South Africa, Tanzania & Zimbabwe are leading producing countries.

TABLE 4:
WORLDWIDE RAW COTTON CONSUMPTION BY CONSUMING COUNTRIES
THOUSAND BALES & *PERCENT* [a]

SEASON BEGINNING AUGUST 1	WORLD TOTAL		NORTH & SOUTH AMERICA												CHINA PRC & E. EUROPE					
			BRAZIL		MEXICO		U.S.A.		OTHER N.A.		OTHER S.A.		TOTAL		CHINA [b]		E. EUROPE [c]		TOTAL	
	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%
1950-1954	37166	*100*	873	*2.3*	339	*0.9*	9317	*25.1*	423	*1.1*	803	*2.2*	11755	*31.6*	4460	*12.0*	6222	*16.8*	10682	*28.8*
1955-1959	44222	*100*	1093	*2.5*	472	*1.1*	8709	*19.7*	426	*1.0*	971	*2.2*	11671	*26.5*	7220	*16.3*	7793	*17.6*	15013	*33.9*
1960-1964	47384	*100*	1264	*2.7*	537	*1.1*	8704	*18.4*	548	*1.2*	1060	*2.2*	12113	*25.6*	5869	*12.4*	9142	*19.3*	15011	*31.7*
1965-1969	53813	*100*	1271	*2.4*	677	*1.2*	8939	*16.6*	604	*1.1*	1178	*2.2*	12669	*23.5*	8541	*15.9*	10655	*19.8*	19196	*35.7*
1970-1974	58805	*100*	1624	*2.8*	772	*1.3*	7513	*12.8*	569	*1.0*	1368	*2.3*	11846	*20.2*	11094	*18.9*	11634	*19.8*	22728	*38.7*
1975-1979	62057	*100*	2289	*3.7*	768	*1.2*	6653	*10.7*	552	*0.9*	1411	*2.3*	11673	*18.8*	12418	*20.0*	11810	*19.0*	24228	*39.0*
1980-1984	67013	*100*	2628	*3.9*	636	*1.0*	5627	*8.4*	566	*0.8*	1208	*1.8*	10665	*15.9*	16262	*24.3*	11402	*17.0*	27664	*41.3*
1985-1989	82843	*100*	3593	*4.1*	685	*1.0*	7344	*8.9*	494	*0.6*	1762	*2.1*	13878	*16.7*	20186	*24.4*	12568	*15.2*	32754	*39.6*
1978	63210	*100*	2456	*3.9*	757	*1.2*	6352	*10.0*	565	*0.9*	1432	*2.3*	11562	*18.3*	13397	*21.2*	11831	*18.7*	25228	*39.9*
1979	65116	*100*	2591	*4.0*	757	*1.2*	6506	*10.0*	574	*0.9*	1398	*2.1*	11826	*18.2*	14146	*21.7*	11866	*18.2*	26012	*39.9*
1980	65281	*100*	2601	*4.0*	759	*1.2*	5891	*9.0*	579	*0.9*	1209	*1.8*	11039	*16.9*	15198	*23.3*	11713	*17.9*	26911	*41.2*
1981	65090	*100*	2631	*4.0*	708	*1.1*	5264	*8.1*	472	*0.7*	1083	*1.7*	10158	*15.6*	16505	*25.3*	11170	*17.2*	27675	*42.5*
1982	66535	*100*	2603	*3.9*	630	*0.9*	5513	*8.3*	583	*0.9*	1090	*1.6*	10419	*15.6*	16809	*25.3*	10919	*16.4*	27728	*41.7*
1983	68174	*100*	2553	*3.8*	528	*0.8*	5926	*8.7*	622	*0.9*	1252	*1.8*	10881	*16.0*	16495	*24.2*	11177	*16.4*	27672	*40.6*
1984	69983	*100*	2753	*3.9*	556	*0.8*	5540	*7.9*	575	*0.8*	1405	*2.0*	10829	*15.4*	16303	*23.3*	12030	*17.2*	28333	*40.5*
1985	76255	*100*	3180	*4.2*	634	*0.8*	6399	*8.4*	620	*0.8*	1625	*2.1*	12458	*16.3*	18778	*24.6*	12631	*16.6*	31409	*41.2*
1986	83690	*100*	3485	*4.2*	550	*0.7*	7452	*8.9*	595	*0.7*	1692	*2.0*	13774	*16.5*	20673	*24.7*	12927	*15.4*	33600	*40.1*
1987	83449	*100*	3721	*4.5*	683	*0.8*	7617	*9.1*	427	*0.5*	1929	*2.3*	14377	*17.2*	20348	*24.4*	12344	*14.8*	32692	*39.2*
1988 g	84284	*100*	3877	*4.7*	778	*0.9*	7550	*9.0*	422	*0.5*	1778	*2.1*	14405	*17.2*	19965	*23.7*	12585	*14.9*	32550	*38.6*
1989 g	86536	*100*	3700	*4.2*	778	*0.9*	7700	*8.9*	407	*0.5*	1784	*2.1*	14369	*16.6*	21168	*24.5*	12355	*14.3*	33523	*38.8*

SEASON BEGINNING AUGUST 1	WEST EUROPE [d] TOTAL		ASIA & OCEANIA																AFRICA	
			INDIA		PAKISTAN		TURKEY		JAPAN		KOREA		TAIWAN		OTHER [e]		TOTAL		TOTAL [f]	
	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%	BALES	%
1950-1954	6909	*18.6*	3731	*10.0*	334	*0.9*	319	*0.9*	2013	*5.4*	143	*0.4*	82	*0.2*	738	*2.0*	7360	*19.8*	460	*1.2*
1955-1959	7155	*16.2*	4407	*10.0*	945	*2.1*	503	*1.1*	2590	*5.9*	257	*0.6*	143	*0.3*	856	*1.9*	9701	*21.9*	682	*1.5*
1960-1964	7163	*15.1*	4906	*10.4*	1199	*2.5*	552	*1.2*	3331	*7.0*	296	*0.6*	254	*0.5*	1523	*3.2*	12061	*25.4*	1036	*2.2*
1965-1969	6512	*12.1*	5078	*9.4*	1668	*3.1*	732	*1.4*	3340	*6.2*	408	*0.8*	408	*0.8*	2178	*4.0*	13812	*25.7*	1624	*3.0*
1970-1974	5897	*10.0*	5414	*9.2*	2184	*3.7*	971	*1.7*	3471	*5.9*	609	*1.0*	643	*1.1*	2844	*4.8*	16136	*27.4*	2198	*3.7*
1975-1979	5534	*8.9*	5697	*9.2*	1987	*3.2*	1358	*2.2*	3240	*5.2*	1178	*1.9*	972	*1.6*	3557	*5.7*	17989	*29.0*	2633	*4.3*
1980-1984	5464	*8.2*	6430	*9.6*	2339	*3.5*	1602	*2.4*	3284	*4.9*	1564	*2.3*	1179	*1.8*	3927	*5.9*	20324	*30.3*	2895	*4.3*
1985-1989	6390	*7.7*	7811	*9.4*	3485	*4.2*	2441	*2.9*	3378	*4.1*	1990	*2.4*	1899	*2.3*	5521	*6.7*	26525	*32.0*	3296	*4.0*
1978	5424	*8.6*	5715	*9.0*	1975	*3.1*	1394	*2.2*	3334	*5.3*	1285	*2.0*	994	*1.6*	3575	*5.7*	18272	*28.9*	2724	*4.3*
1979	5629	*8.6*	5944	*9.1*	1898	*2.9*	1225	*1.9*	3391	*5.2*	1554	*2.4*	1052	*1.6*	3824	*5.9*	18888	*29.0*	2761	*4.3*
1980	5215	*8.0*	6258	*9.6*	2119	*3.2*	1344	*2.1*	3286	*5.0*	1477	*2.3*	1052	*1.6*	3635	*5.6*	19171	*29.4*	2945	*4.5*
1981	5103	*7.8*	5837	*9.0*	2334	*3.6*	1429	*2.2*	3383	*5.2*	1536	*2.4*	1091	*1.7*	3712	*5.7*	19322	*29.7*	2832	*4.4*
1982	5470	*8.2*	6259	*9.4*	2426	*3.6*	1555	*2.3*	3291	*4.9*	1553	*2.3*	1164	*1.7*	3965	*6.0*	20213	*30.4*	2705	*4.1*
1983	5680	*8.3*	6651	*9.8*	2311	*3.4*	1773	*2.6*	3277	*4.8*	1617	*2.4*	1245	*1.8*	4142	*6.1*	21016	*30.8*	2925	*4.3*
1984	5853	*8.4*	7147	*10.2*	2503	*3.6*	1908	*2.7*	3181	*4.5*	1637	*2.3*	1341	*1.9*	4181	*6.0*	21898	*31.3*	3070	*4.4*
1985	5980	*7.8*	7099	*9.3*	2449	*3.2*	2095	*2.7*	3098	*4.1*	1811	*2.4*	1981	*2.6*	4633	*6.1*	23166	*30.4*	3242	*4.3*
1986	6701	*8.0*	7870	*9.4*	3212	*3.8*	2251	*2.7*	3431	*4.1*	1874	*2.2*	2021	*2.4*	5701	*6.8*	26360	*31.5*	3255	*3.9*
1987	6759	*8.1*	7571	*9.1*	3498	*4.2*	2531	*3.0*	3430	*4.1*	1994	*2.4*	1859	*2.2*	5454	*6.5*	26337	*31.6*	3284	*3.9*
1988 g	6177	*7.3*	8127	*9.6*	3865	*4.6*	2572	*3.1*	3530	*4.2*	2114	*2.5*	1800	*2.1*	5827	*6.9*	27835	*33.0*	3317	*3.9*
1989 g	6335	*7.3*	8386	*9.7*	4400	*5.1*	2756	*3.2*	3400	*3.9*	2156	*2.5*	1836	*2.1*	5991	*6.9*	28925	*33.4*	3384	*3.9*

SOURCE: International Cotton Advisory Committee.

a. As 480 pound bales.

b. Includes nominal baleages for North Korea.

c. Principally U.S.S.R.

d. Principally Italy, Germany Fed. Rep. of and Italy.

e. Hong Kong, Indonesia & Thailand are major consumers.

f. Egypt is a major consumer.

g. Data are preliminary.

TABLE 5:
SUPPLY AND DISTRIBUTION OF DOMESTIC & FOREIGN RAW COTTON IN THE U.S. FOR THE SEASONS BEGINNING AUGUST 1ST

THOUSAND RUNNING BALES [a]

SUPPLY & DISTRIBUTION	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989[b]
SUPPLY												
BEGINNING STOCK (AUGUST 1ST)	5347	3958	3000	2668	6632	7937	2775	4102	9348	5026	5771	7500
NET IMPORTS	4	5	28	26	20	12	24	33	3	2	3	2
U.S PRODUCTION (GINNINGS) [c]	10856	14629	10991	15380	11963	7771	12982	13432	9731	14760	15412	11834
CITY CROP (EST) [d]	+	+	131	266								
TOTAL SUPPLY	**16207**	**18592**	**14150**	**18340**	**18615**	**15720**	**15781**	**17567**	**19082**	**19788**	**21186**	**19336**
DISTRIBUTION												
NET EXPORTS	6180	9229	5926	6567	5207	6786	6215	1960	6684	6600	6250	7800
U.S. CONSUMPTION	6352	6506	5891	5264	5513	5926	5540	6399	7452	7700	7550	7700
ADJUSTMENT ITEM [e]	-283	-143	-335	-123	-42	233	-76	-140	-80	-112	-115	-64
ENDING STOCK (JULY 31ST)	3958	3000	2668	6632	7937	2775	4102	9348	5026	5771	7500	3900
DIVIDED AS-												
PRIVATELY OWNED	3291	2463	1995	NO LONGER AVAILABLE								
GOVERNMENT CONTROLLED[f]	667	537	673									
TOTAL DISTRIBUTION	**16207**	**18592**	**14150**	**18340**	**18615**	**15720**	**15781**	**17567**	**19082**	**19959**	**21185**	**19336**

SOURCES: U.S. Department of Agriculture, ***Cotton and Wool Situation and Outlook,*** and the National Cotton Council Economic Services. For earlier years' data, see page 178 of the October 1967 ***Textile Organon*** and page 158 of the October 1978 issue.

a. Adjusted to 480-pound net weight bales.

b. Data estimated except for beginning stock.

c. Total ginnings within the crop year shown. Note that U.S. production given in the world tables on pages 263 and 264 also includes city crop, etc.

d. Consists of rebaled samples and pickings from cotton damaged by fire and weather (partially estimated).

e. The Census Bureau's difference between supply and distribution resulting from baleage destroyed, cotton in transit, etc.

f. Loan and pooled cotton under CCC and earlier programs.

TABLE 6:
U.S. CALENDAR YEAR IMPORTS & EXPORTS OF RAW COTTON & COTTON PRODUCTS

THOUSAND RUNNING BALES

PRODUCTS	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
IMPORTS											
RAW COTTON [a]	4	5	28	26	20	12	24	33	3	2	3
COTTON YARN	63	25	39	48	59	85	110	112	215	275	194
MANUFACTURED GOODS [b]	1698	1529	1650	1956	1869	2280	2943	3282	3980	4866	4414
TOTAL	**1765**	**1559**	**1717**	**2030**	**1948**	**2377**	**3077**	**3427**	**4198**	**5143**	**4611**
EXPORTS											
RAW COTTON [a]	6180	9229	5926	6567	5207	6786	6215	1960	6684	6600	6250
COTTON YARN	42	59	64	45	37	39	23	35	21	28	47
MANUFACTURED GOODS [b]	699	940	1037	720	528	418	406	409	572	621	688
TOTAL	**6921**	**10228**	**7027**	**7332**	**5772**	**7243**	**6644**	**2404**	**7277**	**7249**	**6985**
IMPORT BALANCE											
COTTON YARN+ MANUFACTURED GOODS [b]	+1020	+555	+588	+1239	+1363	+1908	+2624	+2950	+3602	+4492	+3873

SOURCES: U.S. Census Bureau and Department of Agriculture, ***Cotton and Wool Situation and Outlook.***

Raw cotton data are actual bales. Cotton yarn and manufactured goods data are the USDA raw cotton equivalents of these imports and exports.

a. Raw cotton data are for the crop year.

b. Includes thread, twine, cordage, woven & knit cloth, all types of apparel, home furnishings and other items such as industrial belts and belting, bags, braids and narrow fabrics.

TABLE 7:
U.S. COTTON ACREAGE & YIELD

SEASON BEGINNING AUGUST 1	HARVESTED	YIELD[a]	PRODUCTION
	THOUSAND ACRES	LBS	THOUSAND BALES[b]
1978	12400	420	10856
1979	12831	547	14629
1980	13215	404	11122
1981	13841	542	15646
1982	9734	590	11963
1983	7348	508	7771
1984	10380	600	12982
1985	10229	630	13432
1986	8468	552	9731
1987	10035	706	14760
1988[c]	11943	619	15412
1989[d]	9544	595	11834

SOURCE: International Cotton Advisory Committee.

a. Per harvested acre.

b. Production for the crop year in 480-pound net weight bales, regardless of when ginned. Does not include adjustment for city crop, etc.

c. Preliminary data.

d. International Cotton Advisory Committee estimate.

TABLE 8:
WORLDWIDE RAW WOOL PRODUCTION BY THE PRINCIPAL PRODUCING COUNTRIES[a]
MILLION POUNDS, GREASY BASIS & *PERCENT*

YEAR[b]	AUSTRALIA		NEW ZEALAND		SOUTH AFRICA[c]		ARGENTINA		URUGUAY		UNITED STATES		UNITED KINGDOM		TURKEY		E. EUROPE & CHINA[d]		ALL OTHERS		WORLD TOTAL	
	LBS	%	LBS	%	LBS	%	LBS	%	LBS	%	LBS	%	LBS	%	LBS	%	LBS	%	LBS	%	LBS	%
1950 - 54 e	1202	*27.6*	419	*9.6*	272	*6.2*	401	*9.2*	193	*4.4*	289	*6.6*	96	*2.2*	76	*1.8*	667	*15.3*	745	*17.1*	4360	*100*
1955 - 59 e	1537	*29.5*	513	*9.9*	313	*6.0*	406	*7.8*	184	*3.5*	305	*5.9*	113	*2.2*	90	*1.7*	945	*18.1*	800	*15.4*	5206	*100*
1960 - 64 e	1713	*30.2*	607	*10.7*	304	*5.4*	413	*7.3*	187	*3.3*	295	*5.2*	127	*2.2*	98	*1.7*	1132	*20.0*	796	*14.0*	5672	*100*
1965 - 69 e	1836	*30.8*	717	*12.0*	301	*5.0*	454	*7.6*	181	*3.0*	222	*3.7*	123	*2.1*	100	*1.7*	1216	*20.4*	817	*13.7*	5967	*100*
1970 - 74 e	1764	*30.5*	681	*11.8*	246	*4.3*	410	*7.1*	138	*2.4*	169	*2.9*	106	*1.8*	110	*1.9*	1339	*23.2*	813	*14.1*	5776	*100*
1975 - 79 e	1567	*26.6*	707	*12.0*	230	*3.9*	385	*6.5*	145	*2.5*	113	*1.9*	106	*1.8*	122	*2.1*	1549	*26.2*	975	*16.5*	5899	*100*
1980 - 84 e	1614	*25.3*	816	*12.8*	238	*3.7*	358	*5.6*	173	*2.7*	106	*1.7*	116	*1.8*	135	*2.1*	1803	*28.2*	1030	*16.1*	6390	*100*
1985 - 89 e	2030	*29.2*	754	*10.8*	212	*3.0*	347	*5.0*	195	*2.8*	88	*1.3*	139	*2.0*	165	*2.4*	1878	*27.0*	1152	*16.5*	6959	*100*
1978	1556	*26.0*	708	*11.8*	225	*3.8*	377	*6.3*	139	*2.3*	104	*1.7*	108	*1.8*	126	*2.1*	1620	*27.1*	1020	*17.1*	5983	*100*
1979	1564	*25.4*	787	*12.8*	227	*3.7*	377	*6.1*	154	*2.5*	106	*1.7*	106	*1.7*	130	*2.1*	1715	*27.8*	1002	*16.2*	6168	*100*
1980	1543	*24.6*	840	*13.4*	231	*3.7*	375	*6.0*	179	*2.8*	108	*1.7*	115	*1.8*	134	*2.1*	1735	*27.6*	1025	*16.3*	6285	*100*
1981	1581	*25.0*	800	*12.6*	242	*3.8*	370	*5.8*	168	*2.6*	112	*1.8*	112	*1.8*	137	*2.2*	1797	*28.4*	1016	*16.0*	6335	*100*
1982	1548	*24.4*	818	*12.9*	249	*3.9*	357	*5.6*	181	*2.9*	108	*1.7*	110	*1.7*	137	*2.2*	1823	*28.7*	1018	*16.0*	6349	*100*
1983	1605	*25.1*	802	*12.5*	238	*3.7*	357	*5.6*	181	*2.8*	104	*1.6*	119	*1.9*	137	*2.1*	1830	*28.6*	1031	*16.1*	6404	*100*
1984	1795	*27.3*	822	*12.5*	231	*3.5*	331	*5.0*	157	*2.4*	97	*1.5*	123	*1.9*	132	*2.0*	1828	*27.8*	1060	*16.1*	6576	*100*
1985	1830	*27.8*	789	*12.0*	216	*3.3*	335	*5.1*	192	*2.9*	90	*1.4*	128	*1.9*	134	*2.0*	1772	*27.0*	1090	*16.6*	6576	*100*
1986	1955	*29.0*	772	*11.5*	198	*2.9*	331	*4.9*	198	*2.9*	86	*1.3*	130	*1.9*	134	*2.0*	1843	*27.3*	1099	*16.3*	6746	*100*
1987 f	2019	*28.9*	763	*10.9*	203	*2.9*	346	*5.0*	196	*2.8*	88	*1.3*	137	*1.9*	187	*2.7*	1871	*26.8*	1170	*16.8*	6980	*100*
1988 f	2083	*29.1*	752	*10.5*	216	*3.0*	368	*5.1*	192	*2.7*	88	*1.2*	146	*2.0*	187	*2.6*	1936	*27.1*	1188	*16.7*	7156	*100*
1989 f	2264	*30.9*	692	*9.4*	225	*3.1*	353	*4.8*	198	*2.7*	88	*1.2*	154	*2.1*	181	*2.5*	1967	*26.8*	1215	*16.5*	7337	*100*

SOURCE: The Commonwealth Secretariat, Economic Affairs Division, ***Wool Quarterly.***

a. Apparel plus carpet class shorn wool, as well as pulled wool and wool on skins, mostly at the shorn wool equivalent.

b. Calendar years for Northern Hemisphere nations; season beginning July first or October first for Southern Hemisphere countries.

c. Excludes Lesotho and South West Africa.

d. Includes Albania, Bulgaria, China, P.R.C., Czechoslovakia, Germany, Dem. Rep, Hungary, Outer Mongolia, Poland, Romania, U.S.S.R. and Yugoslavia.

e. Five-year averages.

f. Preliminary estimates.

TABLE 9:
SUPPLY & DEMAND OF WOOL IN THE U.S.[a]
MILLION POUNDS, SCOURED BASIS

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
MILL CONSUMPTION OF WOOL											
APPAREL CLASS - DOMESTIC	91.2	92.1	77.4	142.2	119.7	151.8	153.3	123.0	154.3	154.4	140.7
- FOREIGN	37.3	32.4	47.3								
TOTAL APPAREL CLASS	**128.5**	**124.5**	**127.8**	**142.2**	**119.7**	**151.8**	**153.3**	**123.0**	**154.3**	**154.4**	**140.7**
CARPET CLASS	**13.1**	**9.9**	**10.0**	**10.7**	**9.8**	**10.7**	**9.9**	**11.7**	**10.2**	**13.2**	**15.4**
SUBTOTAL ABOVE [b]	**141.6**	**134.4**	**137.8**	**152.9**	**129.5**	**162.5**	**163.2**	**134.7**	**164.5**	**167.6**	**156.1**
CONSUMED ON THE COTTON SYSTEM [c]	3.0	2.5	3.8	2.7	1.8	3.3	5.5	4.2	4.1	6.9	6.8
TOTAL RAW WOOL	**144.6**	**136.9**	**141.6**	**155.6**	**131.3**	**165.8**	**168.7**	**138.9**	**168.6**	**174.5**	**162.9**
REPROCESSED - CARPET - OTHER REUSED - OTHER	16.8	17.0	10.5	10.9	9.8	8.1	7.6	5.3	9.5	7.9	3.8
TOTAL ABOVE	**161.4**	**153.9**	**152.1**	**166.5**	**141.1**	**173.9**	**176.3**	**144.2**	**178.1**	**182.4**	**166.7**
WOOL CONTENT OF IMPORTS											
TOPS [d]	0.6	0.4	0.3	0.3	0.5	0.8	3.2	2.0	1.8	1.0	0.7
YARNS	5.5	3.8	3.9	4.7	7.2	7.6	13.2	12.1	11.8	13.6	12.4
CARPETS & RUGS	13.9	13.9	16.9	18.1	19.6	34.8	51.1	59.2	60.6	51.9	40.6
FABRICS [e,f]	26.4	22.2	21.5	27.8	25.6	28.1	39.1	37.2	26.5	30.3	30.3
KNIT APPAREL	22.3	19.1	24.4	22.8	25.7	30.3	40.0	65.6	80.2	81.6	71.3
OTHER APPAREL	22.6	20.1	17.3	18.1	20.7	28.5	40.9	71.5	75.4	77.3	73.1
OTHER MANUFACTURES [g]	0.9	1.1	0.8	1.3	0.8	1.8	2.6	2.6	4.2	2.6	2.1
TOTAL IMPORTS	**92.2**	**80.6**	**85.1**	**93.1**	**100.1**	**131.9**	**190.1**	**250.2**	**260.5**	**258.3**	**230.5**
WOOL CONTENT OF EXPORTS											
CARPET	0.7	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.3
OTHER	10.9	13.7	23.5	11.6	10.6	9.6	9.4	15.8	14.0	21.2	27.5
TOTAL EXPORTS	**11.6**	**14.0**	**23.8**	**11.8**	**10.8**	**9.7**	**9.5**	**15.9**	**14.2**	**21.3**	**27.8**
NET IMPORTS	**80.6**	**66.6**	**61.3**	**81.3**	**89.3**	**122.2**	**180.6**	**234.3**	**246.3**	**237.0**	**202.7**
TOTAL DISAPPEARANCE	**242.0**	**220.5**	**213.4**	**247.8**	**230.4**	**296.1**	**356.9**	**378.5**	**424.4**	**419.4**	**369.4**
SUPPLY & DEMAND IN CARPETS & RUGS											
CARPET WOOL CONSUMPTION	13.1	9.9	10.0	10.7	9.8	10.7	9.9	11.7	10.2	13.2	15.4
IMPORTS OF CARPETS	13.9	13.9	16.9	18.1	19.6	34.8	51.1	59.2	60.6	51.9	40.6
EXPORTS OF CARPETS	0.7	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.3
TOTAL	**26.3**	**23.5**	**26.6**	**28.6**	**29.2**	**45.4**	**60.9**	**70.8**	**70.6**	**65.0**	**55.7**
% IMPORTS OF TOTAL	*53*	*59*	*63½*	*63½*	*67*	*76½*	*84*	*83½*	*86*	*80*	*73*
SUPPLY & DEMAND IN ALL OTHER PRODUCTS											
OTHER WOOL CONSUMPTION	148.3	144.0	142.1	155.8	131.3	163.2	166.4	132.5	167.9	169.2	151.3
IMPORTS	78.3	66.7	68.2	75.0	80.5	97.1	139.0	191.0	199.9	206.4	189.9
EXPORTS	10.9	13.7	23.5	11.6	10.6	9.6	9.4	15.8	14.0	21.2	27.5
TOTAL	**215.7**	**197.0**	**186.8**	**219.2**	**201.2**	**250.7**	**296.0**	**307.7**	**353.8**	**354.4**	**313.7**
% IMPORTS OF TOTAL	*36½*	*34*	*35½*	*34*	*40*	*38½*	*47*	*62*	*56½*	*58*	*61*

SOURCE: U.S. Department of Agriculture, ***Cotton and Wool Situation and Outlook Yearbook.***

a. Calendar years.

b. Agrees with ***Fiber Organon's*** Selected U.S. Monthly Fiber Data Tables.

c. Raw wool consumed on the cotton spinning system.

d. Includes advanced wool.

e. Includes pile fabric & manufactures, tapestry & upholstery, press & billiard cloths.

f. Primarily broad woven, plus knit & narrow fabrics after 1984.

g. Includes knit & narrow fabrics until 1985, blankets and miscellaneous manufactures not elsewhere specified.

NOVEMBER 1989 CAPACITY SURVEY ANALYSIS

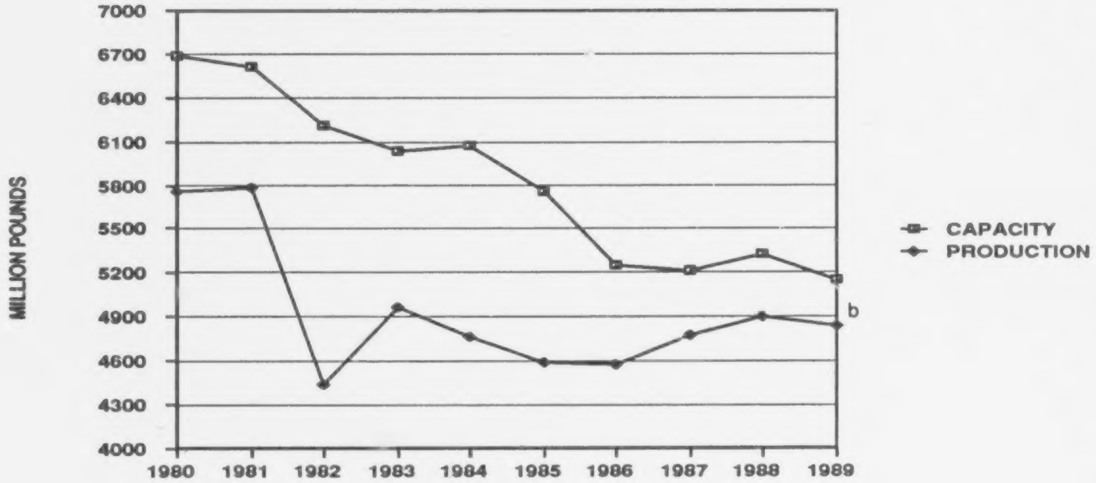
Total producing capacity for all manufactured fibers (except glass fiber) increased by 92 million pounds, or 1% from 1988 levels, to reach 10,397 million pounds. Most of the increase was in capacity for synthetic (noncellulosic) fiber to reach 9,673 million pounds, as artificial (cellulosic) fiber capacity increased 11 million pounds to reach 724 million pounds. (See Table 10)

Since the November 1988 Survey, synthetic (noncellulosic) filament capacity increased 175 million pounds to reach 4,918 million pounds. Within this category, nylon carpet capacity gained 115 million pounds, while polyester textile yarn capacity decreased 68 million pounds. However, the increase in capacity for olefin is mainly due to a more thorough response and not because of additional capacity coming on stream. (See Table 11)

In the same period, producing capacity for synthetic (noncellulosic) staple+tow fell 94 million pounds. The capacities for nylon staple increased 13 million pounds and olefin staple rose by 14 million pounds, while the capacity for polyester staple decreased by 120 million pounds.

Producing capacity and production of five major apparel fibers decreased since 1988, but remain well below their 1980 levels. Since 1980, the producing capacity of apparel fiber has fallen 77% to 5,159 million pounds and production has declined 16% to 4,845 million pounds.

GRAPH 1:
APPAREL FIBER PRODUCTION VS. CAPACITY [a]



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a. Data are based on textile nylon, textile polyester, polyester staple, acrylic+modacrylic and cellulosic yarn+staple. The figures include some production and capacity for polyester staple and acrylic carpet yarn, and industrial rayon.

b. 1989 production data based on 11 months annualized.

TABLE 10:
U.S. MANUFACTURED FIBER PRODUCTION & PRODUCING CAPACITY

MILLION POUNDS

PERIOD	ARTIFICIAL (CELLULOSIC) FIBERS							SYNTHETIC (NONCELLULOSIC) FIBERS [a]			GRAND TOTAL MANUFACTURED FIBERS EXCLUDING GLASS FIBER			NON-ADD GLASS FIBER [d]
	FILAMENT YARN+MONOFIL			STAPLE+TOW										
	RAYON	ACETATE [b]	TOTAL	RAYON	ACETATE [b]	TOTAL	TOTAL	YARN +MONO	STAPLE +TOW	TOTAL	YARN +MONO [c]	STAPLE +TOW	TOTAL	
ACTUAL ANNUAL PRODUCTION														
1977	71	282	353	527	8	535	888	3674	3654	7328	4027	4189	8216	787
1978	62	301	363	535	7	542	905	3830	3953	7783	4193	4495	8688	923
1979	57	317	374	549	7	556	930	4155	4282	8437	4529	4838	9367	1014
1980	47	309	356	443	7	450	806	3744	4148	7892	4100	4598	8698	867
1981	48	257	305	461	4	465	770	3815	4191	8006	4120	4656	8776	1041
1982	33	195	228	355	1	356	584	3057	3403	6460	3285	3759	7044	899
1983	36	228	264	375	1	376	640	3568	3970	7538	3832	4346	8178	1169
1984	41	198	239	389	+	389	628	3525	3947	7472	3764	4336	8100	1394
1985			205 g			353 g	558	3790	3773	7563	3995	4126	8121	NA
1986			215 g			404 g	619	3836	3992	7828	4051	4396	8447	NA
1987			191 g			414 g	605	4010	4306	8316	4201	4720	8921	NA
1988			214 g			400 g	614	4180	4346	8526	4394	4746	9140	NA
ACTUAL & PROJECTED CAPACITY, ANNUAL RATE, AS OF -														
NOV 1977 e	85	315	400	655	8	663	1063	4958	4394	9352	5358	5057	10415	1002
NOV 1978 e	83	330	413	665	8	673	1086	4984	4571	9555	5397	5244	10641	1118
NOV 1979 e	75	355	430	671	8	679	1109	5106	4678	9784	5536	5357	10893	1305
NOV 1980 e	63	324	387	514	8	522	909	4913	4714	9627	5300	5236	10536	1473
NOV 1981 e	52	332	384	509	5	514	898	4746	4950	9696	5130	5464	10594	1561
NOV 1982 e	63	318	381	510	4	514	895	4553	4781	9334	4934	5295	10229	1718
NOV 1983 e	63	268	331	510	4	514	845	4447	4827	9274	4778	5341	10119	1618
NOV 1984 e	63	268	331	510	4	514	845	4479	4981	9460	4810	5495	10305	1743
NOV 1985 e			269 g	510	5	515	784	4668	4890	9558	4937	5405	10342	1769
NOV 1986 e			244 g			465 g	709	4545	4662	9207	4789	5127	9916	1763
NOV 1987 e			244 g			465 g	709	4557	4793	9350	4801	5258	10059	1642
NOV 1988 e			244 g			469 g	713	4743	4849	9592	4987	5318	10305	1729
NOV 1989 e			232 g			492 g	724	4918	4755	9673	5150	5247	10397	1822
MAY 1990 f			232 g			492 g	724	5116	4898	10014	5348	5390	10738	1826
NOV 1990 f			232 g			492 g	724	5293	4952	10245	5525	5444	10969	1891
MAY 1991 f			237 g			492 g	729	5418	5037	10455	5655	5529	11184	1972
NOV 1991 f			237 g			492 g	729	5445	5117	10562	5682	5609	11291	2045

NA No longer available.

a. Included are those listed in the November *Fiber Organon* issue, with the exception of Aramid fiber as of November 1983. Yarn+mono includes olefin film fiber and spunbonded polypropylene. Staple+tow includes fiberfill.

b. Data include diacetate and triacetate. The acetate staple+tow data do not include the large quantities for cigarette filtration.

c. Grand Total Yarn means the yarn+mono shown, excluding glass fiber.

d. Glass fiber, all types.

e. Actual producing capacity as of the date shown.

f. Future producing capacity planned for certain dates as of MAY 1990.

g. Detail withheld due to disclosure of company data.

TABLE 11:
SYNTHETIC (NONCELLULOSIC) FIBER CAPACITY DETAIL

MILLION POUNDS & *AVERAGE DENIER*

	FILAMENT YARN, MONOFIL & OLEFIN FILM FIBER											STAPLE, TOW & FIBERFILL					SYNTHETIC (NONCELLULOSIC) TOTAL
	NYLON+ARAMID				POLYESTER			OLEFIN [a]				NYLON + ARAMID	ACRYL +MOD ACRYL	POLY-ESTER	OLEFIN + VINYON [e]	TOTAL	
			TEXTILE			TEXTILE											
PERIOD	IND	CARP	LBS	DEN	IND	LBS	DEN	YARN	MONO[b]	FILM [b]	TOTAL						
NOV 1977 d	523	829	558	*55*	443	1698	*126*	173	336	398	4958	939	869	2470	116	4394	9352
NOV 1978 d	510	908	565	*53*	443	1643	*116*	174	347	394	4984	1023	865	2554	129	4571	9555
NOV 1979 d	513	950	579	*51*	443	1699	*114*	172	342	408	5106	1020	839	2673	146	4678	9784
NOV 1980 d	515	910	551	*52*	400	1637	*113*	120	350	430	4913	991	830	2759	134	4714	9627
NOV 1981 d	514	893	553	*49*	316	1481	*114*	178	356	455	4746	1010	835	2839	266	4950	9696
NOV 1982 d	474	925	513	*53*	338	1265	*119*	209	369	460	4553	978	832	2700	271	4781	9334
NOV 1983 d	440	907	494	*52*	337	1170	*122*	240	375	484	4447	1017	826	2704	280	4827	9274
NOV 1984 d	437	926	470	*57*	342	1162	*121*	270	386	486	4479	1054	807	2784	336	4981	9460
NOV 1985 d	437	965	466	*53*	374	1097	*126*	304	412	613	4668	1067	631	2785	407	4890	9558
NOV 1986 d	435	964	398	*51*	401	1021	*123*	286	407	633	4545	1077	637	2491	457	4662	9207
NOV 1987 d	418	1005	404	*49*	399	929	*121*	342	393	667	4557	1137	652	2522	482	4793	9350
NOV 1988 d	421	1053	423	*49*	408	968	*121*	392	399	679	4743	1137	642	2584	486	4849	9592
NOV 1989 d	420	1168	430	*48*	420	900	*115*	491	405	684	4918	1150	641	2464	500	4755	9673
MAY 1990 e	421	1187	440	*48*	420	945	*116*	601	403	699	5116	1157	646	2574	521	4898	10014
NOV 1990 e	421	1210	450	*48*	438	985	*118*	619	461	709	5293	1157	646	2615	534	4952	10245
MAY 1991 e	421	1220	455	*48*	441	995	*119*	695	478	713	5418	1157	646	2697	537	5037	10455
NOV 1991 e	421	1223	470	*48*	441	1000	*119*	696	478	716	5445	1167	646	2765	539	5117	10562

NOTE: As of the November 1983 survey, nylon capacity data no longer include Aramid Fiber.

IND Industrial yarn and monofil, i.e., 500 denier & coarser, with an Instron tenacity of 7 grams per denier or more.

CARP Bulked continuous filament yarn for carpets.

TEXTILE Yarn & monofil for other (textile) applications. Low denier industrial yarn is tabulated here also.

a. Includes polyethylene & polypropylene. Not included here are data on spunbonded polyethylene, monofilament bristles, film fiber used for decorative or tying ribbons, etc.

b. Includes the circular and rectangular (ribbon) cross sections plus spunbonded polypropylene. Olefin film fiber includes slit and split or fibrillated fiber.

c. Other yarn & monofil is chiefly saran and spandex. Aramid data are included with nylon.

d. Actual producing capacity as of date shown.

e. Future producing capacity planned for certain dates as of MAY 1990.

f. Data since November 1986 do not include Vinyon.

NOTE: THE INCREASE IN CAPACITY FOR OLEFIN YARN, MONOFILAMENT AND FILM FIBER IS DUE TO A MORE THOROUGH RESPONSE AND NOT BECAUSE OF ADDITIONAL CAPACITY COMING ON STREAM.

SURVEY COVERAGE & DEFINITIONS

The survey figures shown in the table above cover the manufactured fibers in all their primary forms; i.e., filament yarn, monofilaments, polypropylene spunbonded and film fiber are tabulated as filament yarn, while staple, tow and fiberfill are tabulated as staple. The glass fiber data cover all primary forms of that fiber (yarn and strand, staple yarn and sliver, roving and cake, chopped and milled fiber and mat) although only an aggregate figure is published to avoid disclosure of individual company data. **Glass fiber data are no longer included with the filament yarn totals. The data were last published in the December 1984 Issue.** The "capacity" to produce waste is not included in this survey.

Capacity is based on the current and projected "mix" of deniers, filament counts, packages, etc. It is **emphasized** that all figures refer to ***current*** and ***planned*** capacity. **They are not to be interpreted as a production forecast.**

Under the survey definitions, all productive equipment which is currently, or is planned to be, in operable condition is counted as capacity, regardless of whether it is actually producing fiber at the time the capacity measurement is taken. Equipment which is definitely scheduled for scrapping, or which has been scrapped since the last survey, is excluded from the capacity tabulation. The capacity data reflect ***potential***, rather than ***operating*** capacity.

TABLE 12:
WORLDWIDE MANUFACTURED FIBER PRODUCTION & PRODUCING CAPACITY EXCEPT OLEFIN
MILLION POUNDS

MANUFACTURED FIBER PRODUCTION

YEAR	WORLD TOTAL		U.S.A.		WEST EUROPE		EAST EUROPE		JAPAN		CHINA P.R.C.		KOREA REP. OF		TAIWAN		REST OF WORLD	
	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%
1983	30876	*100*	7273	*23*	6454	*21*	5253	*17*	3761	*12*	1139	*4*	1492	*5*	1851	*6*	3653	*12*
1984	32620	*100*	7103	*22*	6630	*20*	5500	*17*	3851	*12*	1571	*5*	1674	*5*	2204	*7*	4087	*12*
1985	33871	*100*	6872	*20*	6788	*20*	5645	*17*	3948	*12*	2011	*6*	1820	*5*	2525	*7*	4262	*13*
1986	34736	*100*	7054	*20*	6685	*19*	5832	*17*	3694	*11*	2067	*6*	1932	*6*	2981	*8*	4491	*13*
1987	36412	*100*	7427	*20*	6691	*19*	6024	*17*	3618	*10*	2291	*6*	2170	*6*	3331	*9*	4860	*13*
1988	37752	*100*	7552	*20*	6840	*17*	6188	*16*	3621	*10*	2487	*7*	2491	*7*	3430	*9*	5143	*14*

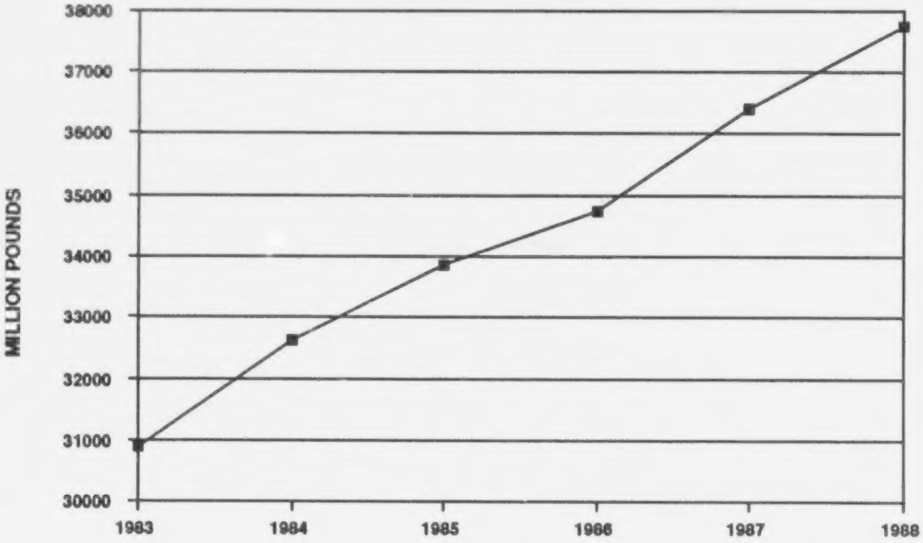
MANUFACTURED FIBER PRODUCING CAPACITY [a]

YEAR	WORLD TOTAL		U.S.A.		WEST EUROPE		EAST EUROPE		JAPAN		CHINA P.R.C.		KOREA REP. OF		TAIWAN		REST OF WORLD	
	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%	POUNDS	%
1983	38414	*100*	8770	*23*	8173	*21*	6420	*17*	4494	*12*	1797	*5*	1651	*4*	2031	*5*	5078	*13*
1984	39017	*100*	8857	*23*	7964	*20*	6681	*17*	4156	*11*	2189	*6*	1715	*4*	2250	*6*	5205	*13*
1985	41017	*100*	8636	*21*	8102	*20*	7132	*18*	4607	*11*	2310	*6*	1773	*4*	2622	*6*	5835	*14*
1986	42187	*100*	8163	*19*	8116	*19*	7147	*17*	4776	*11*	2302	*6*	1981	*5*	3380	*8*	6322	*15*
1987	42812	*100*	8205	*19*	8189	*19*	7365	*17*	4778	*11*	2474	*6*	2034	*5*	3177	*8*	6590	*15*
1988	44958	*100*	8379	*19*	8293	*18*	7494	*17*	4750	*11*	2901	*6*	2398	*5*	3669	*8*	7074	*16*
1989	47461	*100*	8317	*18*	8188	*17*	7550	*16*	4649	*10*	3560	*8*	2702	*5*	4158	*9*	8237	*17*

SOURCE: ***Fiber Organon*** Worldwide Fiber Production & Producing Capacity Survey July 1989, and this issue page 270.

[a] Capacity as of November of each year for the U.S.A. and as of March of each year for the other areas.

GRAPH 2:
WORLDWIDE MANUFACTURED FIBER PRODUCTION (EXCEPT OLEFIN)



GRAPH 3:
WORLDWIDE MANUFACTURED FIBER PRODUCING CAPACITY (EXCEPT OLEFIN)

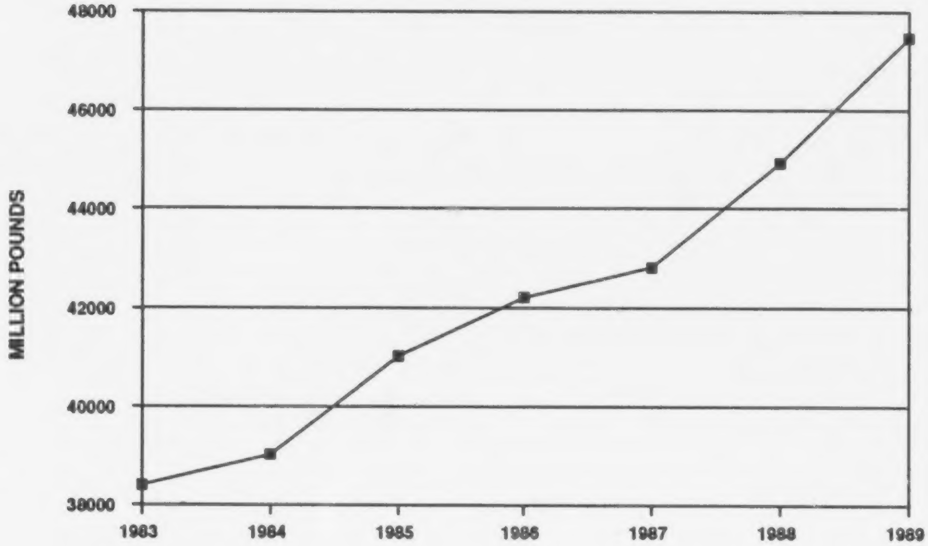


TABLE 13:
FILAMENT YARN DOMESTIC SHIPMENTS[a]

MILLION POUNDS

ITEM		ANNUAL DATA				QUARTERLY DATA							
						1988				1989			
ITEM		1985	1986	1987	1988	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
(C) CELLULOSIC YARN			*(N) NYLON*				*(P) POLYESTER*				*(O) OLEFIN*		
HOSIERY[b]	N	98.1	95.1	93.2	100.3	23.1	24.9	23.9	28.4	j	j	j	
OTHER CIRCULAR KNIT[c]	N	12.9	21.3	25.3	26.4	7.1	6.4	6.7	6.2	32.5	33.8	34.8	
	P	151.2	150.3	102.8	119.5	25.6	28.2	27.9	37.8	40.4	32.8	31.2	
	C	2.6	2.0	1.1	0.6	0.2	0.2	0.1	0.1	0.2	0.1	0.1	
FLAT KNIT	C	53.0	47.8	27.9	24.3	5.7	7.7	5.8	5.1	6.1	7.5	3.7	
	N	143.6	133.8	131.4	133.4	31.2	33.1	33.2	35.9	36.0	34.4	29.8	
	P	160.8	167.1	162.5	162.1	39.2	43.0	38.6	41.3	46.0	47.7	44.5	
CARPET FACE	N	815.4	881.4	916.0	938.3	228.2	233.8	241.2	235.1	225.0	233.8	243.7	
	O	202.1	215.7	244.5	266.6	65.1	67.9	67.2	66.4	69.0	63.3	60.2	
CARPET BACKING[d]	O	354.6	404.1	425.3	427.0	107.9	113.0	102.1	104.0	105.4	123.4	120.6	
OTHER BROAD WOVEN[e]	C	111.3	126.3	122.8	141.9	31.0	35.2	36.0	39.7	35.6	38.5	37.8	
	N	71.4	76.2	79.4	78.3	20.3	17.6	19.8	20.6	21.1	22.6	21.9	
	P	420.1	344.4	379.4	391.3	89.8	95.5	94.0	112.0	100.7	107.2	82.0	
	O	225.7	271.5	317.7	337.3	85.0	84.0	82.5	85.8	88.8	84.3	83.6	
NARROW WOVEN[f]	C	1.5	2.0	2.2	4.4	1.5	1.1	0.9	0.9	1.7	0.8	1.0	
	N	31.1	33.9	42.1	42.0	11.1	11.1	9.9	9.9	9.5	10.2	8.4	
	P	40.0	44.0	66.2	81.0	15.2	18.9	17.8	29.1	18.8	23.2	20.0	
	O	15.2	17.5	17.7	19.0	4.7	4.8	4.8	4.7	4.8	4.7	5.2	
TIRES, INCL. CHAFER[g]	N	146.0	134.2	143.0	132.2	34.5	33.1	31.2	33.4	34.3	33.6	32.6	
	P	155.5	159.3	162.8	171.8	41.3	44.2	43.4	42.9	41.7	43.6	42.3	
OTHER RUBBER INDUSTRY[c, g]	N	15.3	15.2	16.4	20.4	5.5	4.7	4.9	5.3	4.5	4.4	5.0	
	P	31.2	27.2	34.5	25.2	6.7	6.2	6.2	6.1	6.3	8.2	8.9	
ROPE, CORDAGE & FISHLINE	N	35.3	36.4	37.9	36.4	9.7	9.7	8.2	8.8	8.8	9.2	7.9	
	P	13.8	13.0	13.4	12.5	3.7	3.1	2.4	3.3	3.2	3.8	3.5	
	O	108.2	106.3	106.7	120.3	33.3	30.5	24.5	32.0	33.5	30.4	24.9	
ALL OTHER[h]	C	18.7	14.0	12.8	11.4	3.0	3.1	3.0	2.3	2.4	3.4	3.0	
	N	48.3	52.1	69.6	64.7	17.1	21.0	12.1	14.5	16.2	17.7	16.8	
	P	231.7	187.1	191.8	194.0	45.2	52.8	47.9	48.1	34.9	37.1	32.7	
	O	31.8	34.1	23.6	29.6	7.5	7.5	7.7	6.9	6.5	9.4	7.1	
TOTAL ABOVE	**C**	**187.1**	**192.1**	**166.8**	**182.6**	**41.4**	**47.3**	**45.8**	**48.1**	**46.0**	**50.3**	**45.6**	
	N	**1417.4**	**1479.6**	**1554.3**	**1572.4**	**387.8**	**395.4**	**391.1**	**398.1**	**387.9**	**399.7**	**400.9**	
	P	**1204.3**	**1092.4**	**1113.4**	**1157.4**	**266.7**	**291.9**	**278.2**	**320.6**	**292.0**	**303.6**	**265.1**	
	O	**937.6**	**1049.2**	**1135.5**	**1199.8**	**303.5**	**307.7**	**288.8**	**299.8**	**308.0**	**315.5**	**301.6**	
TOTAL DOMESTIC		**3746.4**	**3813.3**	**3970.0**	**4112.2**	**999.4**	**1042.3**	**1003.9**	**1066.6**	**1033.9**	**1069.1**	**1013.2**	
ALSO DIVIDED AS													
APPAREL		*1064.8*	*962.4*	*930.2*	*941.2*	*223.0*	*237.0*	*226.0*	*255.2*	*253.4*	*253.7*	*218.5*	
HOME FURNISHINGS		*1624.9*	*1738.0*	*1838.4*	*1902.6*	*463.0*	*485.0*	*475.1*	*479.5*	*468.6*	*498.1*	*489.9*	
INDUSTRIAL		*1056.7*	*1112.9*	*1201.4*	*1268.4*	*313.4*	*320.3*	*302.8*	*331.9*	*311.9*	*317.3*	*304.8*	
SHIPMENTS OF FEED & PRODUCER-TEXTURED YARN (NONCARPET)[i]													
NYLON		114.9	115.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	
POLYESTER		776.3	634.6	626.3	649.9	146.7	159.2	153.8	190.2	164.5	164.0	139.7	
OLEFIN		22.3	22.9	26.6	24.4	6.4	6.4	5.5	6.1	6.9	4.4	8.0	

NA No longer available.

a. Filament yarn plus monofilament shipments by primary trade or end use; olefin includes spunbonded polypropylene but does not include spunbonded polyethylene.

b. Small quantities of polyester and cellulosic yarn are included in All Other.

c. Small quantities of olefin are included in All Other.

d. Small quantities of nylon and polyester are included in All Other.

e. Other Broad Woven except carpets, tire fabric, flat belting, etc.

f. Narrow Woven includes apparel ribbons and braids, auto seat belts and/or furniture webbing.

g. Cellulosic yarn quantities included in All Other.

h. All Other includes sewing thread and other industrial applications. The olefin quantities include sliver knit backing. Also includes indirect exports.

i. These quantities are included in the Total Domestic area above.

j. Nylon quantities are included in Other Circular Knit.

TABLE 14:
STAPLE+TOW DOMESTIC SHIPMENTS

MILLION POUNDS

ITEM		ANNUAL DATA				QUARTERLY DATA							
						1988				1989			
		1985	1986	1987	1988	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
(R) RAYON (N) NYLON (A) ACRYLIC+MODACRYLIC (P) POLYESTER (O) OLEFIN													
HOSIERY, SWEATERS & CRAFT YARNS[a]	A	197.2	228.8	192.4	183.2	47.5	46.7	46.4	42.6	48.4	47.3	41.5	
	NPR	5.5	5.0	3.5	2.7	0.8	0.7	0.6	0.6	0.7	0.4	0.5	
PILE FABRICS[b]	A	24.5	23.2	20.8	21.3	5.0	5.7	5.6	5.0	5.1	6.0	5.0	
	P	14.9	15.0	19.7	14.7	3.9	3.6	3.3	3.9	3.7	4.0	4.1	
OTHER CIRCULAR KNIT + FLAT KNIT[c]	R	5.5	4.7	3.7	2.5	0.5	0.3	0.8	0.9	0.8	1.0	1.0	
	A	139.1	196.3	185.1	139.0	37.8	39.6	34.2	27.4	35.7	34.9	36.4	
	P	295.5	367.8	453.3	470.0	108.4	112.6	108.5	140.5	127.8	131.4	132.0	
BLANKETS[b]	A	30.2	26.7	25.7	25.1	6.4	5.6	7.9	5.2	7.4	9.3	7.4	
	P	6.2	3.7	9.2	6.9	1.8	1.4	1.6	2.1	2.3	2.9	2.4	
OTHER BROAD WOVEN	R	174.9	218.0	230.7	243.0	58.7	60.5	63.5	60.3	69.1	59.7	50.6	
	N	37.4	37.0	38.7	35.2	8.7	8.0	8.4	10.1	8.1	7.8	8.7	
	A	38.2	35.3	41.7	39.3	10.4	9.6	8.9	10.4	12.6	11.5	8.5	
	P	864.9	885.6	839.2	863.5	210.7	212.9	205.7	234.2	200.8	226.4	197.6	
	O	26.9	18.0	20.2	17.1	4.6	3.8	3.4	5.3	5.2	9.0	9.1	
CARPET FACE YARNS[f]	R	0.5	0.4	+	0.4	0.2	0.1	0	0.1	0.1	0.2	0.2	
	N	773.9	837.8	905.1	f	f	f	f	f	f	f	f	
	P	126.8	145.0	209.0	261.2	66.1	69.0	62.3	63.8	60.1	51.3	48.6	
	O	107.4	117.2	116.2	138.2	30.3	35.4	34.2	38.3	38.5	35.1	32.9	
FIBERFILL[d]	P	281.1	294.9	348.6	357.2	85.3	84.9	92.9	94.1	90.4	93.6	79.2	
FLOCK	NP	5.3	5.9	5.5	6.9	1.6	1.6	1.6	2.1	1.8	1.7	1.7	
	R	1.8	1.8	0.9	0.1	+	+	+	0.1	0	0	0	
NONWOVENS[e]	R	113.5	125.4	124.4	122.3	35.4	36.0	26.7	24.2	27.0	28.5	22.3	
	N	2.5	2.1	1.9	2.1	0.4	0 5	0.6	0.6	0.7	0.6	0.6	
	P	162.5	175.4	204.2	244.1	59.7	55.9	59.0	69.5	68.0	71.7	65.8	
	[g] VINYON+O	135.8	166.2	198.0	180.9	46.0	46.9	45.4	42.6	46.1	46.7	46.8	
ALL OTHER	R	25.9	20.8	22.7	17.2	6.9	5.0	2.9	2.4	2.6	2.3	2.5	
	N	11.2	11.9	14.8	901.4	229.0	214.0	231.1	227.3	231.6	221.1	234.6	
	A	29.5	20.9	13.6	13.2	1.9	2.1	4.3	4.9	3.7	3.4	4.0	
	P	116.9	108.3	115.0	91.3	21.5	31.4	17.3	21.1	21.5	12.9	13.0	
	[g]VINYON+O	9.6	11.3	6.7	8.0	2.9	1.5	1.8	1.8	1.8	2.7	2.6	
TOTAL ABOVE	**R**	**323.7**	**373.0**	**383.1**	**386.0**	**101.9**	**102.0**	**94.0**	**88.1**	**99.7**	**91.7**	**76.6**	
	N	**830.3**	**894.9**	**966.0**	**944.9**	**239.4**	**223.9**	**241.6**	**240.0**	**242.0**	**231.2**	**245.8**	
	A	**458.7**	**531.2**	**479.3**	**421.1**	**109.0**	**109.3**	**107.3**	**95.5**	**112.9**	**112.4**	**102.8**	
	P	**1872.7**	**1998.6**	**2201.0**	**2311.8**	**558.3**	**572.5**	**551.2**	**629.8**	**575.4**	**594.6**	**543.0**	
	[g]VINYON+O	**279.7**	**312.7**	**341.1**	**344.2**	**83.8**	**87.6**	**84.8**	**88.0**	**91.6**	**93.5**	**91.4**	
TOTAL DOMESTIC		**3765.1**	**4110.4**	**4370.5**	**4408.0**	**1092.4**	**1095.3**	**1078.9**	**1141.4**	**1121.6**	**1123.4**	**1059.6**	
ALSO DIVIDED AS													
APPAREL		*1255.0*	*1489.3*	*1479.9*	*1421.6*	*352.6*	*356.4*	*340.5*	*372.1*	*361.6*	*381.5*	*343.2*	
HOME FURNISHINGS		*1536.9*	*1625.8*	*1755.8*	*1827.5*	*451.5*	*445.9*	*455.5*	*474.6*	*467.2*	*441.1*	*441.1*	
INDUSTRIAL		*973.2*	*995.3*	*1134.8*	*1158.9*	*288.3*	*293.0*	*282.9*	*294.7*	*292.8*	*300.8*	*275.3*	

a. Olefin quantities are included in All Other.
b. Rayon and nylon quantities are included in All Other.
c. Nylon quantities are included in All Other.
d. Rayon, acrylic and nylon quantities are included in All Other.
e. Wet & dry laid and needled batts only.
f. Acrylic and nylon quantities are included in All Other.
g. 1987-1989 data exclude Vinyon.

BASF ACRYLIC OPERATIONS SOLD TO MANN INDUSTRIES INC.

BASF has sold its acrylic fibers and spun yarn plants to The Mann Group of Greensboro, NC. The sale includes two plants, support facilities and about 42 acres of land in James City County. (BASF news release)

TABLE 15:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

	1989												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	114	286	408	205	111	192	176	252	148	175			2047	
TEXTURED	180	1	0	24	0	27	497	58	275	222			1284	
OTHER	1726	1532	1671	1449	1732	1673	1402	2036	1873	2048			17142	
MONOFILAMENTS & STRIPS	96	40	120	150	73	38	151	95	105	29			897	
SUBTOTAL ABOVE	2116	1839	2199	1828	1916	1930	2226	2441	2401	2474			21370	13769
STAPLE	5924	3481	5624	4403	5312	3419	3113	5451	3512	4825			45064	
TOW	47	0	0	7	103	0	24	72	207	141			601	
TOPS	6	10	20	10	5	0	0	4	0	0			55	
SUBTOTAL ABOVE	5977	3491	5644	4420	5420	3419	3137	5527	3719	4966			45720	15509
WASTE	18	122	47	213	0	0	0	94	44	0			538	5
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1037	1093	1506	1578	1829	1964	1480	1706	1698	2290			16181	
TEXTURED														
UP TO 450 DENIER	385	217	359	285	319	315	333	428	270	234			3145	
OVER 450 DENIER	1311	1054	1428	1294	1241	654	943	865	1164	1360			11314	
OTHER	3820	3306	3786	3845	4296	5210	4007	4096	3664	3623			39653	
MONOFILAMENTS & STRIPS	72	159	58	113	143	116	120	63	89	132			1065	
SUBTOTAL ABOVE	6625	5829	7137	7115	7828	8259	6883	7158	6885	7639			71358	31577
POLYESTER														
HIGH TENACITY	957	880	909	488	797	703	361	603	557	686			6941	
TEXTURED	883	1673	1738	1766	1775	2385	1747	2230	1822	1231			17250	
POY	0	40	642	1088	2744	3214	3170	2407	989	821			15115	
OTHER	1152	1481	1719	1740	1324	1567	1551	1815	1487	2012			15848	
MONOFILAMENTS & STRIPS	65	80	34	55	24	70	73	65	171	27			664	
SUBTOTAL ABOVE	3057	4154	5042	5137	6664	7939	6902	7120	5026	4777			55818	30210
OTHER SYNTHETIC FILAMENT														
TEXTURED	2057	1685	1550	1054	2074	1555	1199	1981	1981	2030			17166	
OTHER	261	386	339	274	171	136	1049	1015	944	1276			5851	
MONOFILAMENTS & STRIPS	147	299	308	324	395	357	1823	364	1236	1043			6296	
SUBTOTAL ABOVE	2465	2370	2197	1652	2640	2048	4071	3360	4161	4349			29313	35771
STAPLE														
NYLON	1726	1896	1845	1592	1422	1273	1445	1611	1396	2017			16223	
POLYESTER	5584	5594	10047	10627	10327	8674	9941	11597	12729	10748			95868	
ACRYLIC	1934	1028	1576	1518	1206	1511	1335	2194	839	1868			15009	
POLYPROPYLENE	44	55	197	351	93	220	298	55	150	374			1837	
OTHER	172	1040	651	740	167	165	259	245	83	272			3794	
TOW														
NYLON	237	433	257	504	341	315	225	524	221	623			3680	
POLYESTER	47	78	131	49	140	114	31	32	203	102			927	
ACRYLIC	2023	1709	1127	2522	2868	1462	1574	837	1751	1197			17070	
OTHER	117	120	146	0	0	14	0	15	0	0			412	
TOPS	488	358	398	437	334	201	216	136	116	75			2759	
SUBTOTAL ABOVE	12372	12311	16375	18340	16898	13949	15324	17246	17488	17276			157579	164703
WASTE														
NYLON	1971	1804	1754	2087	1949	2027	1769	2266	1265	2170			19062	
POLYESTER	999	340	730	1029	848	973	1475	2106	1821	1942			12261	
OTHER	396	725	477	486	547	389	326	675	897	850			5768	
TOTAL MANUFACTURED FIBERS ABOVE	35996	32985	41602	42307	44708	40933	42113	47993	43707	46443			418787	325552
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	229	84	46	26	74	73	105	171	124	198			1130	
SPUN YARN	492	396	370	287	418	406	466	798	368	374			4375	
SPUN YARNS														
SYNTHETIC	517	686	517	258	677	1019	937	801	902	755			7069	
ARTIFICIAL	0	0	0	0	0	0	0	0	0	0			0	
PUT UP FOR RETAIL SALE	71	50	27	37	74	39	128	63	21	32			542	
GRAND TOTAL ABOVE	37305	34201	42562	42915	45951	42470	43749	49826	45122	47802			431903	391962

SOURCE: U.S. Census Bureau Report IM145X.

Effective January 1,1989 the U.S. Imports are based on the new Harmonized System (HS). On pages 73 through 79 of the *Fiber Organon*, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Imports of Manufactured Fibers for 1988, are published in the *Textile Organon*, February 1989 issue, on page 32.

TABLE 16:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	9	13	45	26	30	16	74	117	78	82			490	
TEXTURED	463	17	29	1	29	28	1009	26	26	0			1628	
OTHER	694	63	18	60	21	15	51	30	6	5			963	
MONOFILAMENTS & STRIPS	90	0	7	93	5	9	21	12	2	8			247	
SUBTOTAL ABOVE	**1256**	**93**	**99**	**180**	**85**	**69**	**1155**	**185**	**112**	**95**			**3328**	**10774**
STAPLE	2827	1786	1325	920	1659	1786	2084	2167	1495	835			16884	
TOPS	94	0	8	129	53	48	7	101	133	0			573	
SUBTOTAL ABOVE	**2921**	**1786**	**1333**	**1049**	**1712**	**1834**	**2091**	**2268**	**1628**	**835**			**17457**	**21377**
WASTE	**1303**	**559**	**1587**	**1116**	**1635**	**1108**	**1021**	**551**	**491**	**674**			**10045**	**1827**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	9331	9410	7884	16614	6326	6999	11613	7987	7577	6351			90092	
TEXTURED														
UP TO 450 DENIER	522	586	719	666	819	1271	488	856	954	951			7832	
OVER 450 DENIER	4706	5051	5459	4430	4096	3626	3176	4030	3042	4025			41641	
OTHER	2038	2103	2133	2188	2571	2003	1669	2028	1758	2422			20913	
MONOFILAMENTS & STRIPS	239	258	187	131	204	303	282	134	27	45			1810	
SUBTOTAL ABOVE	**16836**	**17408**	**16382**	**24029**	**14016**	**14202**	**17228**	**15035**	**13358**	**13794**			**162288**	**137021**
POLYESTER														
HIGH TENACITY	3031	3122	2773	3282	4214	4080	3334	3490	2679	4170			34175	
TEXTURED	3651	3677	2385	2939	3208	3577	1341	2557	2583	2683			28601	
POY	939	1250	2204	1446	629	528	2782	289	655	4749			15471	
OTHER	1007	584	829	963	777	1186	933	722	975	738			8734	
MONOFILAMENTS & STRIPS	208	213	203	132	302	332	275	346	353	237			2601	
SUBTOTAL ABOVE	**8836**	**8846**	**8394**	**8762**	**9130**	**9703**	**8665**	**7404**	**7245**	**12577**			**89582**	**74431**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1033	457	872	903	992	634	980	995	803	439			7908	
OTHER	1342	1471	1735	1730	1559	1332	1724	1527	1938	2032			16390	
MONOFILAMENTS & STRIPS	486	421	771	1317	927	987	687	860	675	538			7669	
SUBTOTAL ABOVE	**2861**	**2349**	**3378**	**3950**	**3478**	**2953**	**3391**	**3382**	**3216**	**3009**			**31967**	**37899**
STAPLE														
NYLON	2605	3265	3262	2629	3280	3985	2532	1797	2075	2333			27763	
POLYESTER	14048	10762	12940	12923	10675	7497	8203	8432	6815	7025			99320	
ACRYLIC	3326	5674	6643	6896	6342	9369	8569	6419	4571	7585			65394	
POLYPROPYLENE	1336	1569	1129	2264	2714	2477	1995	1454	8124	1791			24853	
OTHER	836	2036	1489	2562	1734	1757	2004	1412	2180	1363			17373	
TOW														
NYLON	31	50	50	108	141	86	56	61	32	31			646	
POLYESTER	37	564	472	634	7	621	541	113	319	283			3591	
ACRYLIC	1037	1761	2185	3302	1467	829	1070	899	1013	3056			16619	
OTHER	161	16	34	503	9	7	77	13	213	5			1038	
TOPS	847	964	1224	2191	3092	1230	1557	3000	2448	1206			17759	
SUBTOTAL ABOVE	**24264**	**26661**	**29428**	**34012**	**29461**	**27858**	**26604**	**23600**	**27790**	**24678**			**274356**	**338793**
WASTE														
NYLON	2127	2118	2159	2883	2102	2007	1852	2750	2640	2829			23467	
POLYESTER	4369	3980	3189	5535	3685	2726	3631	2444	3115	4007			36681	
OTHER	5113	6957	8080	6731	7071	5876	8304	5850	3966	4580			62528	
TOTAL MANUFACTURED FIBERS ABOVE	**69886**	**70757**	**74029**	**88267**	**72375**	**68335**	**73942**	**63469**	**63561**	**67078**			**711699**	**734117**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	13	51	43	74	9	93	41	77	46	141			588	
SPUN YARN	0	0	0	0	0	0	0	0	0	0			0	
SPUN YARNS														
SYNTHETIC	732	959	1152	1172	1944	1069	856	1532	1452	1016			11904	
ARTIFICIAL	0	0	0	0	0	0	0	0	2	0			2	
PUT UP FOR RETAIL SALE	606	740	923	580	532	435	536	704	521	1026			6603	
GRAND TOTAL ABOVE	**71237**	**72507**	**76147**	**90093**	**74860**	**69952**	**75375**	**65782**	**65582**	**69261**			**730796**	

SOURCE: U.S. Census Bureau Report EM522.

Effective January 1,1989 the U.S. Exports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Exports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 33.

TABLE 17:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	0	0	6	1	4	0	139	0	37	112			299	
BRAZIL	53	110	55	0	54	76	22	53	53	26			502	
CANADA	745	619	686	613	656	532	399	634	533	747			6164	
CHILE	44	22	22	22	22	44	48	0	44	0			268	
GERMANY, FED. REP. OF	784	515	697	452	436	362	521	928	784	964			6443	
IRELAND	37	0	36	138	34	36	107	69	104	0			561	
JAPAN	55	121	122	185	110	206	57	81	72	42			1051	
KOREA, REP. OF	66	22	0	56	0	22	11	3	0	14			194	
MEXICO	156	99	171	45	153	144	213	141	169	124			1415	
NETHERLANDS	61	239	261	173	204	380	262	413	302	382			2677	
UNITED KINGDOM	75	68	113	135	75	66	84	40	71	47			774	
ALL OTHER COUNTRIES [a]	40	24	30	8	168	62	363	79	232	16			1022	
TOTAL ARTIFICIAL YARN	**2116**	**1839**	**2199**	**1828**	**1916**	**1930**	**2226**	**2441**	**2401**	**2474**			**21370**	**13769**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	323	422	377	226	381	430	394	568	39	482			3642	
CANADA	4757	1990	4093	3462	3409	2370	1638	4140	3000	3512			32371	
CHINA, PRC	104	0	369	0	752	0	110	0	0	0			1335	
GERMANY, DEM. REP.	0	0	95	43	82	80	44	0	0	0			344	
GERMANY, FED. REP. OF	68	67	95	116	124	142	208	179	236	183			1418	
JAPAN	150	521	422	263	107	60	84	61	174	147			1989	
SWITZERLAND	9	25	41	37	65	40	286	7	14	37			561	
TAIWAN	28	0	28	88	320	0	264	176	0	176			1080	
UNITED KINGDOM	265	225	1	47	69	42	67	135	130	190			1171	
ALL OTHER COUNTRIES [b]	273	241	123	138	111	255	42	261	126	239			1809	
TOTAL ARTIFICIAL STAPLE+TOW	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**	**4966**			**45720**	**15509**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	30	46	0	11	38	1479	1	959	774			3338	
BELGIUM	0	56	115	171	343	236	568	685	399	323			2896	
BRAZIL	106	63	170	30	140	201	57	191	92	114			1164	
CANADA	3437	2926	2969	2399	3327	3304	2445	3580	3717	3978			32082	
COSTA RICA	252	487	591	433	415	517	537	515	657	541			4945	
ECUADOR	91	26	144	0	58	23	71	33	33	36			515	
FRANCE	1180	1151	1079	1159	1159	1065	972	799	516	1432			10532	
GERMANY, FED. REP. OF	2231	2204	2641	2514	2357	3691	2202	1988	2515	1844			24187	
ISRAEL	299	217	172	149	285	244	117	124	103	98			1808	
ITALY	924	323	873	859	1031	132	489	526	620	568			6345	
JAPAN	469	610	568	609	548	502	845	1110	960	1304			7525	
KOREA, REP. OF	10	49	7	81	98	42	89	0	59	17			452	
MEXICO	1447	2222	2385	1857	2527	2911	2490	2806	2210	1691			22546	
NETHERLANDS	68	193	267	338	69	63	398	104	7	381			1888	
SINGAPORE	0	25	0	33	0	33	16	16	16	0			139	
TAIWAN	50	175	650	1296	2844	3217	3133	2680	1259	1138			16442	
THAILAND	65	64	69	67	63	171	124	142	70	96			931	
UNITED KINGDOM	1482	1357	1409	1649	1790	1506	1635	2014	1437	2234			16513	
ALL OTHER COUNTRIES [c]	36	175	221	260	67	330	189	324	443	196			2241	
TOTAL SYNTHETIC YARN	**12147**	**12353**	**14376**	**13904**	**17132**	**18246**	**17856**	**17638**	**16072**	**16765**			**156489**	**97558**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	3	9	13	1	0	79	0	11	2			118	
AUSTRALIA	31	160	1	82	16	43	149	78	0	134			694	
BELGIUM	47	99	60	56	67	7	7	378	35	368			1124	
CANADA	1413	737	1481	1489	1292	874	622	818	1242	1417			11385	
FRANCE	230	304	253	405	388	336	136	519	102	573			3246	
GERMANY, FED. REP. OF	1985	1758	1318	1293	1491	1780	1084	2057	753	1440			14959	
INDIA	0	0	3772	3400	709	49	1772	2893	3690	992			17277	
IRELAND	280	480	305	348	0	36	0	0	0	0			1449	
ITALY	482	394	206	46	61	34	70	193	264	217			1967	
JAPAN	1773	1757	2303	2770	2429	1826	1929	2894	1648	2554			21883	
KOREA, REP. OF	2297	3387	3933	4165	5687	4876	4806	2638	3190	4035			39014	
MEXICO	1049	372	420	1016	783	462	579	797	434	464			6376	
NETHERLANDS	31	103	99	81	56	105	21	617	365	44			1522	
SPAIN	8	0	178	39	65	128	0	0	0	34			452	
SWITZERLAND	146	165	134	166	125	42	242	214	88	128			1450	
TAIWAN	262	235	215	808	917	2057	2093	1994	4020	3424			16025	
TURKEY	18	0	0	0	111	37	90	105	0	269			630	
UNITED KINGDOM	2318	2304	1643	2107	2671	1229	1645	810	1535	1139			17401	
ALL OTHER COUNTRIES [d]	2	53	45	56	29	28	0	241	111	42			607	
TOTAL SYNTHETIC STAPLE+TOW	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**	**17276**			**157579**	**164703**

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[a] Belgium 617, Italy 123, Taiwan 68, China, PRC 51, France 46, Greece 41, Norway 32, Singapore 23, Egypt 21.

[b] Poland 275, Finland 274, Australia 217, Italy 193, Romania 175, Korea, Rep. of 171, Sweden 131, France 122, Belgium 73, Spain 47, Norway 40, Peru 37, Chile 24, India 18, Thailand 11, Mexico 1.

[c] Ireland 614, Portugal 340, Egypt 258, Turkey 201, Peru 139, Austria 124, Romania 86, China, PRC 82, Switzerland 72, Spain 69, Australia 51, El Salvador 38, Nigeria 35, Morocco 26, Hong Kong 24, Colombia 21, Honduras 20, Sweden 17, Greece 11, Denmark 9, Haiti 2, Norway 1, Yugoslavia 1.

[d] Romania 243, Israel 169, Hong Kong 92, Brazil 59, Germany, Dem. Rep. 42, China, PRC 2.

Effective January 1, 1989 the U.S. Manufactured Imports for Consumption by Country of Origin are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

Selected U.S. Manufactured Imports for Consumption by Country of Origin for 1988 are published in the ***Textile Organon***, February 1989 issue, page 31.

TABLE 18:
SELECTED U.S. MONTHLY FIBER DATA
MILLION POUNDS

ITEM	1989												YEAR TO DATE[a]	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	17.3	17.1	18.4	21.5	18.3	18.4	18.9	17.8	17.3	19.9	14.8		199.7	196.7
RAYON STAPLE	34.5	32.1	36.5	31.4	34.8	30.9	24.8	29.4	26.7	DATA NO LONGER AVAILABLE				
TOTAL ARTIFICIAL (CELLULOSIC)	**51.8**	**49.2**	**54.9**	**52.9**	**53.1**	**49.3**	**43.7**	**47.2**	**44.0**	**19.9**	**14.8**		**199.7**	**196.7**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	31.3	30.5	32.6	32.3	28.9	32.7	29.1	29.2	28.6	28.8	28.7		332.7	343.8
- CARPET	74.9	77.2	82.0	77.5	86.1	78.5	73.4	89.9	88.7	79.5	78.7		886.4	900.0
- TEXTILE[f]	33.9	33.2	35.0	34.6	33.8	34.2	31.8	32.3	32.7	33.1	32.9		367.5	350.2
POLYESTER - INDUSTRIAL[d]	28.6	29.7	30.9	32.2	30.4	32.8	29.8	32.5	29.2	30.3	26.4		332.8	328.5
- TEXTILE[f]	73.2	71.2	74.4	78.2	77.0	66.1	73.5	54.9	58.5	62.5	55.6		745.1	778.4
OLEFIN[e]	105.3	104.3	103.6	104.1	112.3	105.5	94.8	107.0	107.0	109.4	108.1		1161.4	1123.0
TOTAL YARN	**347.2**	**346.1**	**358.5**	**358.9**	**368.5**	**349.8**	**332.4**	**345.8**	**344.7**	**343.6**	**330.4**		**3825.9**	**3823.9**
STAPLE+TOW+FIBERFILL														
NYLON	82.3	78.4	88.8	76.4	81.3	78.3	74.9	90.8	85.5	85.9	81.9		904.5	885.9
ACRYLIC+MODACRYLIC	41.7	46.2	48.6	49.2	51.7	44.0	41.1	47.6	44.1	44.0	41.9		500.1	541.1
POLYESTER	205.8	192.1	212.4	214.3	208.1	193.9	182.3	198.8	182.0	200.4	182.4		2172.5	2216.4
OLEFIN	31.1	31.6	32.0	31.4	32.3	31.2	27.8	33.9	33.1	33.4	30.1		347.9	334.2
TOTAL STAPLE	**360.9**	**348.3**	**381.8**	**371.3**	**373.4**	**347.4**	**326.1**	**371.1**	**344.7**	**363.7**	**336.3**		**3925.0**	**3977.6**
TOTAL SYNTHETIC (NONCELLULOSIC)	**708.1**	**694.4**	**740.3**	**730.2**	**741.9**	**697.2**	**658.5**	**716.9**	**689.4**	**707.3**	**666.7**		**7750.9**	**7801.5**
TOTAL MANUFACTURED FIBER	**759.9**	**743.6**	**795.2**	**783.1**	**795.0**	**746.5**	**702.2**	**764.1**	**733.4**	**727.2**	**681.5**		**7950.6**	**7998.2**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	11.7	10.9	11.3	10.4	9.7	8.9	11.0	10.7	11.6	10.2	8.9		8.9	11.2
RAYON STAPLE	13.0	13.2	11.7	12.5	13.4	15.8	16.8	16.3	18.1	DATA NO LONGER AVAILABLE				
TOTAL ARTIFICIAL (CELLULOSIC)	**24.7**	**24.1**	**23.0**	**22.9**	**23.1**	**24.7**	**27.8**	**27.0**	**29.7**	**10.2**	**8.9**		**8.9**	**11.2**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.4	24.8	22.4	22.9	24.2	24.5	26.7	27.3	28.7	30.4	25.8		25.8	23.6
- CARPET	63.5	63.2	62.8	68.7	64.0	66.8	73.6	59.3	54.6	51.5	56.6		56.6	56.0
- TEXTILE[f]	47.1	48.3	46.4	47.0	47.4	49.2	52.7	54.1	56.3	55.3	53.6		53.6	50.1
POLYESTER - INDUSTRIAL[d]	35.0	31.4	30.6	31.6	30.9	31.9	33.9	32.3	33.2	33.9	35.6		35.6	30.1
- TEXTILE[f]	73.5	76.9	81.8	85.1	85.0	89.1	99.7	115.7	116.8	117.7	120.5		120.5	84.1
OLEFIN[e]	53.1	53.8	58.0	57.8	58.5	60.7	61.1	60.6	62.3	61.9	64.9		64.9	53.1
TOTAL YARN	**296.6**	**298.4**	**302.0**	**313.1**	**310.0**	**322.2**	**347.7**	**349.3**	**351.9**	**350.7**	**357.0**		**357.0**	**297.0**
STAPLE+TOW+FIBERFILL														
NYLON	51.8	52.9	51.0	57.5	57.5	57.0	59.1	46.9	46.8	48.8	50.5		50.5	46.7
ACRYLIC+MODACRYLIC	70.5	68.3	69.0	67.3	65.2	69.7	71.7	69.3	66.3	67.2	64.0		64.0	61.1
POLYESTER	163.5	163.8	158.5	164.4	176.2	191.0	226.5	233.6	218.9	219.7	204.4		204.4	159.9
OLEFIN	31.0	31.3	32.8	34.3	35.2	33.3	34.2	34.1	30.5	33.2	34.2		34.2	30.8
TOTAL STAPLE	**316.8**	**316.3**	**311.3**	**323.5**	**334.1**	**351.0**	**391.5**	**383.9**	**362.5**	**368.9**	**353.1**		**353.1**	**298.5**
TOTAL SYNTHETIC (NONCELLULOSIC)	**613.4**	**614.7**	**613.3**	**636.6**	**644.1**	**673.2**	**739.2**	**733.2**	**714.4**	**719.6**	**710.1**		**710.1**	**595.5**
TOTAL MANUFACTURED FIBER	**638.1**	**638.8**	**636.3**	**659.5**	**667.2**	**697.9**	**767.0**	**760.2**	**744.1**	**729.8**	**719.0**		**719.0**	**606.7**
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL	12.1	12.8	14.1	11.5	11.5	11.3	10.6	10.9					94.8	96.1
CARPET CLASS WOOL	0.8	1.4	1.5	1.6	1.6	1.3	1.2	1.5					10.9	10.9
TOTAL RAW WOOL	**12.9**	**14.2**	**15.6**	**13.1**	**13.1**	**12.6**	**11.8**	**12.4**					**105.7**	**107.0**
RAW COTTON	289.5	301.0	339.2	305.7	362.3	343.5	286.8	341.0	404.4	324.5			3297.9	2939.7

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a. "Year to date" totals for stock, are the latest month's figures. **Data for Rayon staple no longer available.**

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

ANNUAL INDEX - VOLUME SIXTY

The names of U.S. fiber manufacturers, together with the products made, are listed on pages 243-251. The corresponding list of world producers is on pages 118-148. Monthly U.S. fiber shipments and stock data, appearing in the table "Selected U.S. Monthly Fiber Data," are usually found on the last page of each ***Fiber Organon*** issue. In the following index this appears under the heading "Monthly Data".

Each issue of the ***Fiber Organon*** contains one or more principal topics. The following is a brief outline of the major subjects covered in the 1989 issues. The numbers in parentheses are the pages of each month's issue.

JANUARY	Special Feature: "Capacity Utilization Review" (1-20)
FEBRUARY	Special Feature: "1988 Import/Export Review" (21-36)
MARCH	Special Feature: "1988: A Year in Perspective" (37-64)
APRIL	Special Feature: " Import Review " (65-80)
MAY	Special Feature: "1988 Per Capita Consumption Review" (81-100)
JUNE	**Worldwide Manufactured Fiber Survey:** Directory of Worldwide Manufactured Fiber Producers (101-156)
JULY	Special Feature: "Worldwide Manufactured Fiber Data in Pounds" (157-180)
AUGUST	Special Feature: "Raw Fiber Equivalent of Imports, Exports & Balance" (181-200)
SEPTEMBER	**Annual U.S. End Use Survey** (201-220)
OCTOBER	Special Feature: "U.S. Manufactured Textile Trade Balance: An Overview" (221-240)
NOVEMBER	**1988 Directory of American Fiber Manufacturers** (241-260)
DECEMBER	Special Features: "Worldwide Natural Fiber Survey"; "November 1989 Capacity Survey Analysis" (261-284)

-A-

ACETATE
- Capacity
  - Producing - 5, 89, 113, 169, 270
  - Utilization - 7
- Definition - 118, 243
- Distribution - 50
- Exports - 13, 26, 33, 97, 151, 179, 191, 219, 231, 233, 255, 277
- Mill Consumption - 45, 86
- Plants - 103
- Producers - 142-143, 244
- Production
  - U.S. - 4, 48, 89, 272
  - World - 110-111, 166-167
- Shipments & Stock - See MONTHLY DATA

ACRYLIC+MODACRYLIC
- Capacity
  - Producing - 5, 90, 113, 171, 271
  - Utilization - 7, 115, 171
- Definition - 118, 243
- Distribution - 51
- Exports - 13, 26, 33, 35, 97, 99, 151, 179, 191, 195, 219, 231, 233, 255, 257, 277
- Imports - 12, 27, 29, 32, 35, 96, 99, 150, 178, 190, 195, 218, 230, 232, 234, 254, 257, 276
- Mill Consumption - 43, 86
- Plants - 103, 243
- Producers - 142-143, 244-246
- Production - See also Quarterly Data
  - U.S. - 4, 49, 114-115, 170-171
  - World - 114-115, 170-171
- Quarterly Data - 35, 57, 99, 153, 195, 239, 257, 275
- Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
  - Total U.S. Shipments - 19

APPAREL - See also DOMESTIC SHIPMENTS & MONTHLY DATA
- End Uses -204, 208-209
- Imports, Exports & Balance - 23, 41-43, 54, 87, 224, 225, 227
- Per Capita Consumption of Imports - 87
- Production - 269
- Raw Fiber Equivalent - 41-43, 54, 87
  - Revised - 183-186
- Wool - 43, 54, 183, 186, 268
- Yarn Capacity - 5, 90, 269, 271

ARAMID FIBERS - 118, 243
- Producer - 142, 245

AVAILABLE SUPPLY - 14-15, 35, 99, 195, 217, 257

AZLON FIBERS - 118

- B -

BROAD WOVEN FABRICS
- Domestic Shipments - 56-57, 152-153, 238-239, 274-275
- Imports & Exports - 23, 227

- C -

CAPACITY
- "Capacity Utilization Review" - 3-9
- "May 1989 Capacity Survey Analysis" - 88-90
- "November 1989 Capacity Survey Analysis" - 269-271
- Producing Capacity
  - U.S. - 3, 6, 9, 89-90, 107, 111, 113, 116, 163, 167, 169, 171, 175, 270, 271
  - World - 104-116, 160-175, 272-273
- Utilization - 3, 6-7, 115, 171

CAPTIVE FIBER PRODUCERS - 118, 243

CARPETS & RUGS (FLOOR COVERINGS) - See also DOMESTIC SHIPMENTS and MONTHLY DATA
- End Use - 201, 211
- Nylon Carpet Yarn Capacity - 5, 8, 90, 271
- Nylon Carpet Yarn Production - 4, 8
- Wool - 201, 211, 268

CELLULOSIC FIBERS (RAYON, ACETATE) - See also MONTHLY DATA
  Capacity
    Producing - 5, 9, 89, 107, 167, 270
    Utilization - 7
  Distribution - 50
  End Uses - 201-213
  Exports - 13, 14-15, 24-25, 26, 33, 34-35, 50, 97, 98-99, 151, 179, 191, 194-195, 219, 231, 233, 235, 255, 256-257, 277
    Dollar Value - 26, 233, 235
  Imports - 12, 14-15, 27, 28, 29-30, 32, 34-35, 50, 96, 98-99, 150, 178, 190, 194-195, 206, 218, 230, 232, 234, 254, 256-257, 276
    Dollar Value - 27, 232, 234
  Mill Consumption - 45, 50, 52, 70, 86, 205, 223
  Net Available - 14-15, 34-35, 98-99, 194-195, 205, 256-257
  Plants - 103, 252
  Producers - 142-143, 244-246
  Production - See also Quarterly Data
    U.S. - 4, 9, 34-35, 48, 89, 98-99, 110-111, 166-167, 270
    World - 110-111, 166-167
  Quarterly Data- 34-35, 56-57, 98-99, 152-153, 194-195, 238-239, 256-257, 274-275
  Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
    Total U.S. Shipments - 18
  Waste - 47

CHAFER - See DOMESTIC SHIPMENTS

CIGARETTE TOW
  Production - 116, 175

CIRCULAR KNIT FABRICS - See DOMESTIC SHIPMENTS

CONSUMPTION - See also IMPORTS FOR CONSUMPTION
  "1988 Per Capita Consumption Review" - 83-87
  Apparel - 87
  Domestic Consumption of Products - 53, 71
  End Use -201, 204-213
  Mill - 16-17, 45-46, 50-51, 52-53, 70-71, 86, 201, 223
  Per Capita - 83-87
  Raw Cotton - 55, 263, 265
  Wool - 268

COTTON - See also MONTHLY DATA
  Acreage & Yield - 267
  Available Supply - 265
  Consumption - 55, 208-213, 263, 265
    Domestic - 53, 55, 71
    Mill - 16-17, 45-46, 50-51, 52-53, 70-71, 86, 201, 203
    Per Capita - 83, 85, 86-87
  Distribution - 266
  End Uses - 204-213
  Imports & Exports - 206, 263, 266
  Imports & Exports of Manufactures - 23, 42, 53, 54, 71, 87, 183, 185, 205, 228, 266
  Linter Production - 205
  Manufactures Trade Balance, 1988
    Monthly - 44
  Production - 263, 264, 266, 267
  Raw Fiber Equivalents of Manufactures - 42, 54, 87, 183, 185, 228
  Stock - 263, 266
  Worldwide Demand - 101, 157

- D -

DOMESTIC CONSUMPTION OF PRODUCTS - 53, 71

DOMESTIC SHIPMENT See also QUARTERLY DATA
  Filament Yarn - 56, 152, 238, 274
  Staple+Tow - 57, 153, 239, 275

- E -

EMPLOYMENT, INDUSTRY - 39

END USES - See also DOMSTIC SHIPMENTS
  "Manufactured Fiber End Use Survey" - 201, 204- 213
  Apparel - 201, 204, 208-209
  Exports - 201, 204, 207
  Floor Coverings - 201, 204, 211
  Home Textiles - 201, 204, 210-211
  Industrial & Other - 201, 204, 212-213
  Summary - 201, 204
  Summary Changes - 201

EUROPE - See also WORLDWIDE, BY AREA OR SELECTED COUNTRIES
  Exports to - 14, 236
  Imports from - 14
    /Exports & Net Available - 14
  Glass Fiber Production & Producing Capacity - 116, 175
  Mill Consumption - 16, 223
  Plants, Number of - 103
  Producing Capacity - 105, 109, 113, 115, 116, 161, 165, 169, 171, 172
  Production - 104-105, 108-109, 112-113, 114- 115, 116, 117, 160-161, 164-165, 168-169, 170-171, 172, 175

EXPORTS
  "1988 Import/Export Review" - 24-29
  "U.S. Manufactured Fiber Textile Trade Balance" - 224-228
  By Country of Destination - 24-25, 236-237
  Cotton - 183, 185, 263, 265
  Distribution - 50-51
  Dollar Value - 26, 223, 235
  End Use - 201, 204, 207
  /Imports & Balance - 14-15, 23, 30, 225-228
  /Imports & Balance of Manufactures - 23, 30 41-43, 54, 183-186, 225-228
  Manufactures - 71
  Quarterly Data - 34-35, 98-99, 194-195, 256-257
  Raw Fiber Equivalents - 41-43, 54, 183-186
  Semimanufactured Products - 207
  U.S. Exports of Manufactured Fiber - 13, 14-15, 24, 25, 26, 33, 34-35, 97, 98-99, 151, 179, 191, 194-195, 219, 231, 233, 235, 236- 237, 255, 256-257, 277
  Wool - 268

- F -

FACE YARNS - See CARPETS & RUGS

FIBERFILL - See also DOMESTIC SHIPMENTS
  End Use - 212, 216

FILM FIBER - See OLEFIN FIBER
  Definition - 118, 243

FLAT GOODS - See DOMESTIC SHIPMENTS

FLUOROCARBON (FEP & TFE) - 118, 243
  Producer - 142, 244

- G -

GENERIC NAMES - 118, 243

GLASS FIBER
  Capacity
    Producing - 5, 89, 116, 175, 270
  Definition, Forms of - 118, 243
  Distribution - 50
  Exports - 13, 26, 33, 233
  Imports - 12, 27, 32, 232
  Mill Consumption - 50
  Plants - 103, 252
  Producers - 145, 251
  Production
    U.S. - 48, 89, 116, 175, 270
    World - 116, 175
  Quarterly Data - 34, 98, 194, 256

- H -

HARMONIZED TARIFF SCHEDULE - 73-79, 188-189

HOME FURNISHINGS/HOME TEXTILES - See also DOMESTIC SHIPMENTS
  End Uses - 201, 204, 210-211
  Imports & Exports - 23, 54, 87, 228
  Raw Fiber Equivalent - 41-43, 54, 87

HOSIERY - See also DOMESTIC SHIPMENTS
  End Uses - 208, 214
  U.S. Production - 187

- I -

IMPORTS
  "1988 Import/Export Review" - 24-29
  "U.S. Manufactured Fiber Textile Trade Balance" - 224-228
  Apparel
    /Exports & Balance (Lbs.) - 23, 41-43, 54, 87, 227, 228
  Consumption
    Domestic - 53, 71
    Mill - 50-51, 52, 70, 206
    Other Fibers - 72
    Per Capita - 87
  Cotton - 53, 71, 87, 266
  Distribution - 50-51
  Dollar Value - 27, 232, 234
  /Exports & Balance - 14-15, 23, 30, 225-228
  /Exports & Balance of Manufactures - 23, 30, 41-43, 54, 183-186, 225-228
  Quarterly Data - 34-35, 98-99, 194-195, 256-257
  Raw Fiber Equivalent - 41-43, 54, 87, 183-186
  Semimanufactured - 41-43, 54, 71, 87, 183-186, 206
  U.S. Selected for Consumption
    By Country - 11, 28-29, 31, 95, 149, 177, 192, 217, 229, 253, 278
    By Fiber - 12, 27, 32, 96, 150, 178, 190, 218, 230, 232, 234, 254, 276
  Wool - 268

INDUSTRIAL - See also DOMESTIC SHIPMENTS and MONTHLY DATA
  Definition - 243
  End Uses - 201, 204, 212-213
  Exports - 24-25, 54
  Imports - 54, 87
  Raw Fiber Equivalent - 41-43
  Yarn Capacities - 5, 90, 271

- J -

JUTE
  Imports - 72

- K -

KNIT FABRIC See also DOMESTIC SHIPMENTS
  Imports - 206
  Imports, Exports & Balance - 30, 228

- L -

LINEN
  Imports - 72

- M -

MILL CONSUMPTION
  Of Fiber - 45-46, 50-51, 52-53, 70-71, 86, 205, 266, 268
  Distribution - 50-51, 266
  Domestic - 52
  In Selected Countries - 16-17, 223

MODACRYLIC FIBER - See ACRYLIC

MONTHLY DATA
  Selected Imports for Consumption
    By Country - 11, 31, 95, 149, 177, 192, 217, 229, 253, 278
    By Fiber - 12, 32, 96, 150, 178, 190, 218, 230, 254, 276
    Selected U.S. Fiber Data - 19, 36, 55, 58, 80, 100, 154, 180, 193, 220, 240, 258, 279
  Total Manufactured Fiber Shipments - 1, 21, 37, 67, 81, 157, 181, 221, 241, 261
  U.S. Exports of Manufactured Fibers - 13, 33, 97, 151, 179, 191, 219, 231, 255, 276

- N -

"1988: A YEAR IN PERSPECTIVE" - 45-54

"1988: IMPORT/EXPORT REVIEW" - 24-29

NARROW FABRICS
  Definitions - 215
  End Use - 206, 210
  Import Summary - 206
  Imports, Exports & Balance - 30, 228

NARROW WOVEN
  Domestic Shipments - 56, 152, 238, 274

NONCELLULOSIC FIBERS (Acrylic+Modacrylic, Aramid, Nylon, Olefin, Polyester)
  See also MONTHLY DATA & QUARTERLY DATA
  Capacity
    Producing - 3, 5, 8, 9, 89-90, 107, 115, 163, 171, 270, 271
    Utilization - 3, 7, 115, 171
  Distribution - 51
  End Uses - 201-213
  Exports -13, 14-15, 24, 25, 26, 33, 34-35, 97, 98-99, 151, 179, 191, 194-195, 219, 231, 233, 235, 236-237, 255, 256-257, 277
    Dollar Value - 26, 233, 235
  Imports - 11, 12, 27, 28-29, 31, 32, 95, 96, 149, 150, 177, 178, 190, 192, 217, 218, 229, 230, 232, 234, 253, 254, 276, 278
    Dollar Value - 27, 232, 234
  Mill Consumption - 45, 51, 52, 70, 86, 205, 223
  Net Available - 14-15, 34-35, 98-99, 194-195, 256-257
  Plants - 103, 252
  Producers - 142-145, 244-250
  Production - See also Quarterly Data
    U.S. - 3, 4, 6, 9, 48, 49, 89, 106-107, 114-115, 117, 162-163, 170-171, 176, 270
    World - 14-15, 104-107, 112-115, 117, 160-163, 170-171, 176, 272
  Quarterly Data - 34-35, 56-57, 98-99, 152-153, 194-195, 238-239, 256-257, 274-275
  Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
    Total U.S. Shipments - 10
  Waste - 29, 47, 52, 203
  Worldwide Demand - 101, 157

NONWOVENS - See also DOMESTIC SHIPMENTS
  End Use - 212

NYLON FIBERS
  Capacity
    Producing - 5, 90, 115, 171, 271
    Utilization - 7, 115, 171
  Definition - 118, 243
  Distribution - 51
  Exports - 13, 26, 33, 34-35, 97, 98-99, 151, 179, 191, 194-195, 219, 231, 233, 235, 255, 256-257, 277
  Imports - 12, 27, 28, 32, 35, 96, 99, 150, 178, 190, 195, 218, 230, 232, 234, 254, 256, 276
  Mill Consumption - 45, 86
  Plants - 103, 252
  Producers - 142-145, 244-246
  Production - See also Quarterly Data
    U.S. - 4, 49, 114-115, 170-171
    World - 114-115, 170-171
  Quarterly Data - 34-35, 56-57, 98-99, 152-153, 194-195, 238-239, 256-257, 274-275
  Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
    Total U.S. Shipments - 10
  Waste - 203

- O -

OLEFIN FIBERS (POLYETHYLENE, POLYPROPYLENE)
  Capacity
    Producing - 5, 90, 271
    Utilization - 7
  Definition - 118, 243
  Distribution - 51
  Exports - 13, 26, 33, 34-35, 97, 98-99, 151, 179, 191, 194-195, 219, 231, 233, 235, 255, 256-257, 277
  Imports - 12, 27, 28, 32, 35, 96, 99, 150, 178, 190, 195, 218, 230, 232, 234, 254, 256, 276
  Mill Consumption - 45, 86
  Plants - 252
  Producers - 143-145, 246-250
  Production - See also Quarterly Data
    U.S. - 4, 49, 117, 176
    World - 117, 176
  Quarterly Data - 34-35, 56-57, 98-99, 152-153, 194-195, 238-239, 256-257, 274-275

- Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
  - Total U.S. Shipments - 10

- P -

PBI- 243
- Producer - 143, 245

"1988 PER CAPITA CONSUMPTION REVIEW" - 83-87

PLANTS
- Directory - 142-145, 244-250
- Number of - 103, 252

POLYCARBONATE FIBERS - 118, 243
- Producer - 143, 246

POLYESTER
- Capacity
  - Producing - 5, 90, 115, 171, 271
  - Utilization - 7, 115, 171
- Definition - 118, 243
- Distribution - 51
- Fiberfill - 57, 153, 212, 239, 275
- Exports - 13, 26, 33, 34-35, 97, 98-99, 151, 179, 191, 194-195, 219, 231, 233, 235, 255, 256-257, 277
- Imports - 12, 27, 28, 32, 35, 96, 99, 150, 178, 190, 195, 218, 230, 232, 234, 254, 256, 276
- Mill Consumption - 45, 86
- Plants - 103, 252
- Producers - 142-145, 244-246
- Production- See also Quarterly Data
  - U.S. - 4, 49, 114-115, 170-171
  - World - 114-115, 170-171
- Quarterly Data - 34-35, 56-57, 98-99, 152-153, 194-195, 238-239, 256-257, 274-275
- Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
  - Total U.S. Shipments - 10
- Waste - 203

POLYETHYLENE & POLYPROPYLENE - See OLEFIN FIBERS

PRODUCER DIRECTORIES
- U.S. - 142-145, 244-246
- World - 118-146

PRODUCTION - See specific fiber types or groups and QUARTERLY DATA

- Q -

QUARTERLY DATA
- Domestic Shipments by End Use
  - 1988 Data - 56-57
  - 1989 Data - 152-153, 238-239, 274-275
- Production, Domestic Shipments, Exports, Imports, & Stock -
  - 1988 Data - 34-35
  - 1989 Data - 98-99, 194-195, 256-257
- U.S. Imports, Exports & Balance - 30

-R-

RAYON
- Capacity
  - Producing - 5, 89, 270
  - Utilization - 7
- Definition - 118, 243
- Distribution - 50
- Exports - 13, 26, 33, 35, 97, 99, 151, 179, 191,195, 219, 231, 233, 255, 257, 277
- Imports - 12, 27, 28, 32, 35, 96, 99, 150, 178, 190, 195, 218, 230, 232, 234, 254, 256, 276
- Mill Consumption - 45, 86
- Plants - 103
- Producers - 142-143, 244-246
- Production - See also Quarterly Data
  - U.S. - 4, 35, 48, 89, 99, 110-111, 112-113, 166-167, 168-169, 195, 257
  - World - 110-111, 112-113, 166-167, 168-169
- Quarterly Data - 35, 57, 99, 153, 195, 239, 257, 275
- Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
- Total U.S. Shipments - 10
- Waste - 47

ROPE, CORDAGE & FISHLINE - See also DOMESTIC SHIPMENTS
- Definition - 216
- End Use - 213

RUGS - See CARPETS & RUGS

- S -

SARAN - 49, 118, 243
- Producer - 142, 244

SILK
- Deliveries, Raw - 47
- Imports - 72
- Mill Consumption - 53
- Worldwide Demand - 101, 159

SISAL
- Imports - 72

SHIPMENTS & STOCK
- Quarterly Data - 34-35, 98-99, 194-195, 256-257
- Domestic Shipments - 56-57, 152-153, 238-239, 274-275
- Selected U.S. Monthly Fiber Data - 18, 19, 36, 55, 58, 80, 100, 154, 180, 193, 220, 240, 258, 279
- Total Manufactured Fiber Shipments - 1, 21, 37, 67, 81, 157, 181, 221, 241, 261

SPANDEX - 49, 118, 243
- Producers - 142, 245

SPUN YARN
- Imports for Consumption - 12, 29, 32, 96, 150, 178, 190, 218, 230, 232, 234, 254, 276
- Imports & Exports of Manufactures - 30, 225
- Net Imports by Country - 14-15

STAPLE+TOW (+FIBERFILL)
- Capacity
  - Producing - 5, 89-90, 105, 107, 115, 161, 163, 171, 270-271
  - Utilization - 7, 115, 171
- Distribution - 50-51
- Domestic Shipments - 35, 57, 99, 153, 195, 239, 257, 275
- End Uses - 57, 153, 201-213, 239, 275
- Exports - 13, 14-15, 26, 33, 35, 97, 99, 151, 179, 191, 195, 219, 231, 233, 235, 255, 257, 277
  - Dollar Value - 26, 233, 235
- Imports - 11, 12, 27, 28, 31, 32, 95, 96, 149, 150, 177, 178, 190, 192, 217, 218, 229, 230, 232, 234, 253, 254, 276, 278
  - Dollar Value - 27, 232, 234
- Mill Consumption - 50-51, 52, 70, 205, 223
- Net Available - 14-15, 35, 99, 195, 205, 257
- Producers - 142-145, 244-246
- Production - See also Quarterly Data
  - U.S. - 4, 12, 14-15, 48-49, 89, 106-107, 110-111, 112-113, 114-115, 162-163, 166-167, 168-169, 170-171, 270
  - World - 14-15, 110-111, 112-113, 114-115, 162-163, 166-167, 1687-169, 170-171
- Quarterly Data - 35, 57, 99, 153, 195, 239, 257, 275
- Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
  - Total U.S. Shipments - 10
- Worldwide Demand - 101, 159

- T -

TEXTURED YARN - See also DOMESTIC SHIPMENTS
- Exports - 13, 33, 97, 151, 179, 191, 219, 231, 255, 277
- Imports - 12, 32, 95, 150, 178, 190, 218, 230, 254, 276

THREAD, YARN & SEWING
- End Use - 207, 213
- Imports - 12, 32, 95, 150, 178, 190, 207, 218, 230, 254, 276
- Imports, Exports & Balance - 30, 225

TIRE CORD & FABRIC
- Domestic Shipments - 56, 152, 238, 274
- End Use - 212
- Imports, Exports & Balance - 30, 225
- Steel - 216

- V -

- **VINYON** - 118, 243 See also OLEFIN FIBERS
  - Producer - 143

- W -

- **WASTE**
  - End Use - 203, 216
  - Exports - 13, 33, 97, 151, 179, 191, 219, 231, 255, 277
  - Imports - 12, 32, 95, 150, 178, 190, 218, 230, 254, 276
  - Mill Consumption - 52, 70
  - Shipments - 47, 52
- **WOOL** - See also MONTHLY DATA
  - Consumption
    - Domestic - 46, 53, 87
    - Mill - 16-17, 45, 46, 53, 86, 205, 223, 268
    - Per Capita - 83, 85, 86, 87
    - See also MONTHLY DATA
  - Demand
    - U.S. - 268
    - Worldwide - 101, 159
  - End Use - 201-213
  - Imports - 268
  - Imports & Exports of Manufactures - 23, 43, 53, 71, 87, 183, 186, 225
  - Manufactures Trade Balance, 1988
    - Monthly - 44
  - Production - 267
  - Raw Fiber Equivalents of Manufactures - 43, 54, 87, 183, 186
  - Supply & Demand of Wool in the U.S. - 268
- **WORLD AFFILIATIONS & OWNERSHIP** - 147-148
- **WORLDWIDE, BY AREA OR SELECTED COUNTRIES**
  - Employment, Industry - 39
  - Fiber Production & Producing Capacity - 104-116, 160-175, 263-265
  - Mill Consumption of Manufactured Fiber, Cotton & Wool in Selected Countries - 16-17, 223
  - 1987 Manufactured Fiber Production, Import, Export & Net Available Supply by Country - 14-15
  - 1989 Worldwide Directory of Manufactured Fiber Producers - 118-146
  - Number of Manufactured Fiber Producing Plants - 103
  - Raw Cotton Consumption by Consuming Country - 265
  - Raw Cotton Production by Producing Country - 264
  - Raw Wool Production by Producing Country - 267
  - Selected U.S. Exports by Country of Destination - 24-25, 236-237
  - Selected U.S. Manufactured Fiber Imports for Consumption by Country of Origin- 11, 28-29, 31, 95, 149, 177, 192, 217, 229, 253, 278
  - U.S. 1987 Fiber Imports and Exports by Country - 14-15

-Y -

- **YARN + MONOFILAMENTS**
  - Capacity
    - Producing - 4, 89-90, 105, 107, 115, 161, 163, 171, 270-271
    - Utilization - 7, 115, 171
  - Definition - 118, 243
  - Distribution - 50-51
  - Domestic Shipments - 34, 56, 98, 194, 238, 256, 274
  - End Uses - 56, 152, 201-213, 238, 256
  - Exports - 13, 14-15, 26, 33, 34, 97, 98, 151, 179, 191, 194, 219, 256, 257, 274, 277
    - Dollar Value - 26, 233, 235
  - Imports - 11, 12, 27, 28, 31, 32, 34, 95, 96, 98, 149, 150, 177, 178, 190, 192, 194, 217, 218, 229, 230, 232, 234, 253, 254, 256, 276, 278
    - Dollar Value - 27, 232, 234
  - Mill Consumption - 50-51, 52, 70, 205, 223
  - Net Available - 14-15, 34, 98, 194, 205, 256
  - Producers - 142-145, 244-246
  - Production - See also Quarterly Data
    - U.S. - 4, 12, 14-15, 48-49, 89, 106-107, 110-111, 112-113, 114-115, 162-163, 166-167, 168-169, 170-171
    - World - 14-15, 106-107, 110-111, 112-113, 114-115, 162-163, 166-167, 168-169, 170-171
  - Quarterly Data - 34, 56, 98, 152, 194, 238, 256, 274
  - Shipments & Stock - See MONTHLY DATA & QUARTERLY DATA
    - Total U.S. Shipments - 10
  - Worldwide Demand - 101, 159

HAPPY HOLIDAYS !
FROM THE STAFF
AT FEB

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FIBER ORGANON

Formerly Textile Organon

Volume 61, No. 1 ☐ January 1990

A publication of *Fiber Economics Bureau, Inc.*

Highlights

- Capacity Utilization Review...begins on page 3.
- Annual Shipment Summary...see page 10.
- Worldwide Net Available Supply...begins on page 14.

SHIPMENTS:

In December, total manufactured fiber shipments reached 670 million pounds, 1% below the 678 million pounds shipped in November and 14% below the 775 million pounds shipped in December 1988.

December shipments of synthetic (noncellulosic) filament yarn rose 1% to 331 million pounds and staple+tow fell 4% to 321 million pounds.

Contributing to the decrease in shipments over the previous month were olefin yarn down 12% or 13 million pounds, acrylic+modacrylic staple+tow down 12% or 5 million pounds and nylon staple+tow down 8 million pounds or 10%.

Year-to-date domestic shipments of manufactured fiber are down slightly and exports are down 19%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1989		% CHG	1988	% CHG	YEAR TO DATE [d]		% CHG YTD
	DEC	NOV	12/89 - 11/89	DEC	12/89 - 12/88	1989	1988	1989-1988
ARTIFICIAL (CELLULOSIC)								
YARN	19.3	14.8	*+30.4*	20.0	*-3.5*	219.0	216.7	*+1.1*
RAYON STAPLE [d]	NA	NA	*NA*	NA	*NA*	NA	NA	*NA*
TOTAL ARTIFICIAL (CELL.)	**19.3**	**14.8**	***+30.4***	**20.0**	***-3.5***	**219.0**	**216.7**	***+1.1***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	31.9	28.7	*+11.1*	31.4	*+1.6*	364.6	375.2	*-2.8*
- CARPET	81.3	78.7	*+3.3*	76.2	*+6.7*	967.7	976.2	*-0.9*
- TEXTILE [a]	32.9	32.9	--	36.8	*-10.6*	400.4	387.0	*+3.5*
POLYESTER - INDUSTRIAL	32.2	26.4	*+22.0*	31.7	*+1.6*	365.0	360.2	*+1.3*
- TEXTILE [a]	59.8	55.7	*+7.4*	93.5	*-36.0*	804.0	871.9	*-7.8*
OLEFIN	92.4	105.4	*-12.3*	96.6	*-4.3*	1251.0	1219.6	*+2.6*
TOTAL YARN	**330.5**	**327.8**	***+0.8***	**366.2**	***-9.7***	**4152.7**	**4190.1**	***-0.9***
STAPLE+TOW+FIBERFILL								
NYLON	74.0	81.9	*-9.6*	78.0	*-5.1*	978.5	963.9	*+1.5*
ACRYLIC+MODACRYLIC	37.1	41.9	*-11.5*	49.1	*-24.4*	537.2	590.2	*-9.0*
POLYESTER	181.0	182.4	*-0.8*	232.5	*-22.2*	2353.5	2448.9	*-3.9*
OLEFIN	28.5	29.1	*-2.1*	29.6	*-3.7*	375.4	363.8	*+3.2*
TOTAL STAPLE	**320.6**	**335.3**	***-4.4***	**389.2**	***-17.6***	**4244.6**	**4366.8**	***-2.8***
TOTAL SYNTHETIC (NONCELL.)	**651.1**	**663.1**	***-1.8***	**755.4**	***-13.8***	**8397.3**	**8556.9**	***-1.9***
TOTAL MANUFACTURED FIBER	**670.4**	**677.9**	***-1.1***	**775.4**	***-13.5***	**8616.3**	**8773.6**	***-1.8***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS [b]	622.5	641.6	*-3.0*	716.1	*-13.1*	8129.9	8173.6	*-0.5*
EXPORTS [c]	47.9	36.3	*+32.0*	59.3	*-19.2*	486.4	600.0	*-18.9*

– No change.
NA No longer available
a. Includes low denier industrial yarn.
b. Includes olefin exports.
c. Excludes olefin exports.
d. **Data for rayon staple no longer available.**

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A Monthly Review
Formerly ***Textile Organon***

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FIBER ECONOMICS BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc.
101 Eisenhower Parkway
Roseland, NJ 07068
U.S.A.
Telephone: (201) 228-1107
Facsimile: (201) 228-7598

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CONTENTS

Features

Capacity Utilization Review 3 - 9
- Review of Production, Producing Capacity & Capacity Utilization 3
- Summary of Annual Production 4
- Summary of Producing Capacities 5
- Graph 1: Synthetic (Noncellulosic) Fiber Production, Capacity & Capacity Utilization 6
- Summary of Capacity Utilization Rates 7
- Graph 2: Acrylic+Modacrylic Staple+Tow Capacity & Production 7
- Graph 3: Nylon Carpet Yarn Capacity & Production 8
- Graph 4: Polyester Textile Yarn Capacity & Production 8
- Graph 5: Polyester Staple+Tow Capacity & Production 8
- Production of Synthetic (Noncellulosic) & Artificial (Cellulosic) Fiber as a Percentage of Total Manufactured Fiber Production 9
- Producing Capacity of Synthetic (Noncellulosic) & Artificial (Cellulosic) Fiber as a Percentage of Total Manufactured Fiber Capacity 9

Annual Shipment Summary 10
- Graph 6: Total Manufactured Fiber Production & Shipments 10
- Total Manufactured Fiber Shipments 10

Worldwide Net Available Supply 14 - 17
- 1988 Manufactured Fiber Production, Import, Export & Net Available Supply by Country 14 - 15
- Mill Consumption of Manufactured Fiber, Cotton & Wool in Selected Countries 16 - 17

Industry Regulars

Total U.S. Manufactured Fiber Shipments 1

Monthly U.S. Manufactured Fiber Data 11 - 13
- Imports by Country of Origin 11
- Imports by Fiber 12
- Exports by Fiber 13

Selected U.S. Fiber Data 18 - 19
- Annual Data 18
- Monthly Data 19

CAPACITY UTILIZATION REVIEW

***Editor's Note** : This issue features production, producing capacity and capacity utilization in the industry from 1979 to 1989. Capacity utilization rates are based on production and capacity sizes. Thus, a utilization rate can be raised by an increase in production, a decrease in capacity or a combination of these two.*

During this period, several notable trends surfaced. The growth of synthetic (noncellulosic) fiber production from 1979 (an increase of 1% by 1989) and a decline of artificial (cellulosic) yarn production (a decline of 42% by 1989). During the same time, capacity for synthetic (noncellulosic) fiber remained virtually unchanged (9.7 billion pounds in 1989), while capacity for artificial (cellulosic) yarn declined by 46%.

This report presents data in six tables and four graphs: Review of Production, Producing Capacity & Capacity Utilization; Summary of Annual Production (1979-1989); Summary of Producing Capacities (1979-1989); Summary of Capacity Utilization Rates (1979-1989); Production of Synthetic (Noncellulosic) & Artificial (Cellulosic) Fibers as a Percentage of Total Manufactured Fiber Production; and Producing Capacity of Synthetic (Noncellulosic) & Artificial (Cellulosic) Fibers as a Percentage of Total Manufactured Fiber Capacity. Graphs show synthetic (noncellulosic) fiber production, capacity & capacity utilization, and also capacity & production trends of acrylic+modacrylic staple+tow, nylon carpet yarn, polyester textile yarn and polyester staple+tow.

The Review of Production, Producing Capacity & Capacity Utilization at the bottom of this page, ties the three major components of this report - production, producing capacity and capacity utilization - into one table for easy reference.

For this report, Fiber Economics Bureau **November** capacity survey data are used as the annual capacity figures. The Total Synthetic (Noncellulosic) data in this report do not include Glass Fiber or miscellaneous fibers such as spandex and saran.

TABLE 2:
REVIEW OF PRODUCTION, PRODUCING CAPACITY & CAPACITY UTILIZATION [a]
MILLION POUNDS & *PERCENT*

FIBER TYPE	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
SYNTHETIC (NONCELLULOSIC)											
PRODUCTION	8418	7874	7985	6442	7534	7473	7564	7828	8316	8526	8515
CAPACITY	9784	9627	9696	9334	9274	9460	9558	9207	9350	9592	9673
UTILIZATION (%)	*86.0*	*81.8*	*82.4*	*69.0*	*81.2*	*79.0*	*79.1*	*85.0*	*88.9*	*88.9*	*88.0*
ARTIFICIAL (CELLULOSIC)											
PRODUCTION	930	806	770	584	640	628	558	619	605	614	218[b]
CAPACITY	1109	909	898	895	845	845	784	709	709	713	232[b]
UTILIZATION (%)	*83.9*	*88.7*	*85.7*	*65.3*	*75.7*	*74.3*	*71.2*	*87.3*	*85.3*	*86.1*	*94.0*
TOTAL MANUFACTURED FIBERS											
PRODUCTION	9348	8680	8755	7026	8174	8101	8122	8447	8921	9140	8733
CAPACITY	10893	10536	10594	10229	10119	10305	10342	9916	10059	10305	9905
UTILIZATION (%)	*85.8*	*82.4*	*82.6*	*68.7*	*80.8*	*78.6*	*78.5*	*85.2*	*88.7*	*88.7*	*88.2*

a. Does not include data for Glass Fiber, saran, spandex, Aramid after 1982 or Vinyon after 1986.
b. Artificial (cellulosic) fiber for 1989 includes yarn+monofilament only. Data for staple+tow is no longer available.

TABLE 3:
SUMMARY OF ANNUAL PRODUCTION
MILLION POUNDS

YEAR	ARTIFICIAL (CELLULOSIC) FIBERS						TOTAL ARTIFICIAL (CELLULOSIC)
	FILAMENT YARN+MONOFIL			STAPLE+TOW			
	RAYON	ACETATE	TOTAL	RAYON	ACETATE	TOTAL	
1979	57	317	374	549	7	556	**930**
1980	47	309	356	443	7	450	**806**
1981	48	257	305	461	4	465	**770**
1982	33	195	228	355	1	356	**584**
1983	36	228	264	375	1	376	**640**
1984	41	198	239	389	+	389	**628**
1985	b	b	205	b	b	353	**558**
1986	b	b	215	b	b	404	**619**
1987	b	b	191	b	b	414	**605**
1988	b	b	214	b	b	400	**614**
1989	b	b	218	b	b	NA	**NA**

YEAR	SYNTHETIC (NONCELLULOSIC) FIBERS														TOTAL SYN. (NON-CELL.)
	YARN+MONOFILAMENTS									STAPLE+TOW					
	NYLON+ARAMID [a]				POLYESTER				TOTAL	NYLON+ ARAMID [a]	POLY- ESTER	ACRYLIC+ MODACR	OLEFIN+ VINYON [c]	TOTAL STAPLE	
	IND	TEX	CARP	TOTAL	IND	TEX	TOTAL	OLEFIN	YARN						
1979	499	528	755	1782	373	1342	1715	639	4136	939	2462	761	120	4282	**8418**
1980	437	466	728	1631	286	1176	1462	632	3725	727	2527	779	116	4149	**7874**
1981	410	461	710	1581	309	1260	1569	643	3793	752	2607	691	142	4192	**7985**
1982	315	354	573	1242	292	921	1213	585	3040	685	1955	624	138	3402	**6442**
1983	315	415	762	1492	299	1060	1359	716	3567	926	2184	671	186	3967	**7534**
1984	379	394	804	1577	316	884	1200	748	3525	835	2192	671	250	3948	**7473**
1985	343	353	819	1515	294	1027	1321	954	3790	828	2020	631	295	3774	**7564**
1986	339	360	907	1606	319	854	1173	1058	3837	908	2132	616	335	3991	**7828**
1987	364	381	952	1697	337	842	1179	1134	4010	992	2362	592	360	4306	**8316**
1988	377	383	968	1728	367	861	1228	1224	4180	942	2452	588	364	4346	**8526**
1989	373	412	974	1759	367	842	1209	1260	4228	981	2384	542	380	4287	**8515**

NA **No Longer Available.**

a. Data since 1982 do not include Aramid.

b. Detail withheld due to company disclosure.

c. Data for Vinyon not included after 1986.

Rayon yarn includes industrial (high tenacity) yarn and textile (regular+intermediate tenacity) yarn+monofilaments.

Acetate includes diacetate and triacetate. The acetate staple+tow data do not include tow for cigarette filtration.

Olefin includes polypropylene yarn+monofilaments+spunbonded+film fiber and polyethylene monofilaments+film fiber.

For the purposes of this report, production data for miscellaneous fibers, such as saran and spandex, are not included.

TABLE 4:
SUMMARY OF PRODUCING CAPACITIES
MILLION POUNDS

	ARTIFICIAL (CELLULOSIC) FIBERS						TOTAL ARTIFICIAL (CELLULOSIC)
	FILAMENT YARN+MONOFIL			STAPLE+TOW			
YEAR[a]	RAYON	ACETATE	TOTAL	RAYON	ACETATE	TOTAL	
1979	75	355	430	671	8	679	**1109**
1980	63	324	387	514	8	522	**909**
1981	52	332	384	509	5	514	**898**
1982	63	318	381	510	4	514	**895**
1983	63	268	331	510	4	514	**845**
1984	63	268	331	510	4	514	**845**
1985	b	b	269	510	5	515	**784**
1986	b	b	244	b	b	465	**709**
1987	b	b	244	b	b	465	**709**
1988	b	b	244	b	b	469	**713**
1989	b	b	232	b	b	492	**724**

	SYNTHETIC (NONCELLULOSIC) FIBERS														TOTAL SYN. (NON-CELL.)	GLASS FIBER
	YARN+MONOFILAMENTS									STAPLE+TOW						
	NYLON+ARAMID[c]				POLYESTER				TOTAL	NYLON+	POLY-	ACRYLIC+	OLEFIN+	TOTAL		
YEAR[a]	IND	TEX	CARP	TOTAL	IND	TEX	TOTAL	OLEFIN	YARN	ARAMID[c]	ESTER	MODACR	VINYON[d]	STAPLE		
1979	513	579	950	2042	443	1699	2142	922	5106	1020	2673	839	146	4678	**9784**	1305
1980	515	551	910	1976	400	1637	2037	900	4913	991	2759	830	134	4714	**9627**	1473
1981	514	553	893	1960	316	1481	1797	989	4746	1010	2839	835	266	4950	**9696**	1561
1982	474	513	925	1912	338	1265	1603	1038	4553	978	2700	832	271	4781	**9334**	1718
1983	440	494	907	1841	337	1170	1507	1099	4447	1017	2704	826	280	4827	**9274**	1618
1984	437	470	926	1833	342	1162	1504	1142	4479	1054	2784	807	336	4981	**9460**	1743
1985	437	466	965	1868	374	1097	1471	1329	4668	1067	2785	631	407	4890	**9558**	1769
1986	435	398	964	1797	401	1021	1422	1326	4545	1077	2491	637	457	4662	**9207**	1763
1987	418	404	1005	1827	399	929	1328	1402	4557	1137	2522	652	482	4793	**9350**	1642
1988	421	423	1053	1897	408	968	1376	1470	4743	1137	2584	642	486	4849	**9592**	1729
1989	420	430	1168	2018	420	900	1320	1580	4918	1150	2464	641	500	4755	**9673**	1822

a. **All annual capacity data are as of November of that year.**
b. Detail withheld due to disclosure.
c. Data since 1982 do not include Aramid.
d. Data for Vinyon not included after 1986.

The data do not include acetate tow for cigarette filtration.

IND means industrial yarn and monofil, i.e., coarser than 500 denier with an Instron tenacity of 7 grams or more per denier.

CARP means bulked continuous filament yarn for carpets.

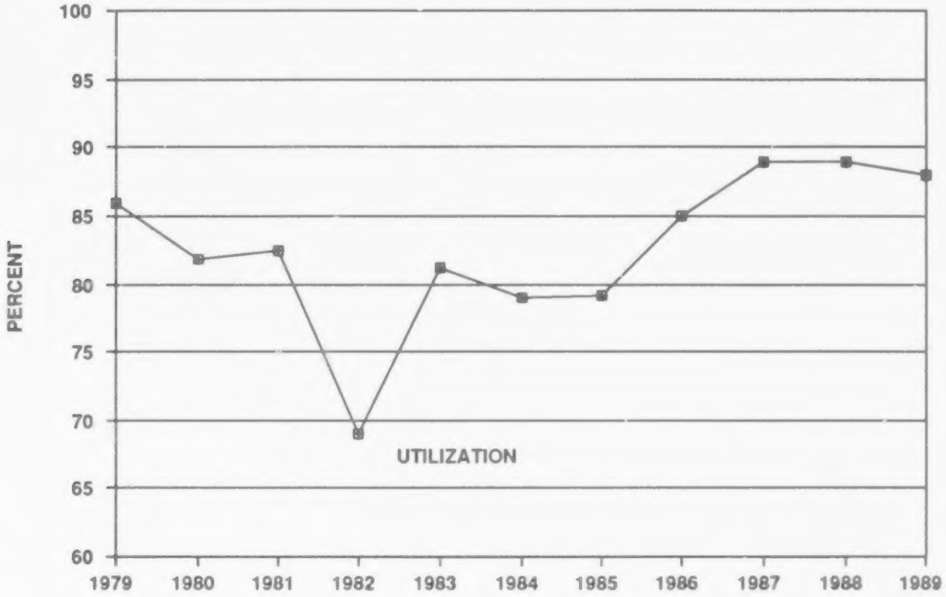
TEX means yarn & monofil for other (textile) applications. Low denier industrial yarn is tabulated here also.

Olefin includes polyethylene & polypropylene. Not included here are data on spunbonded polyethylene, monofilament bristles and film fiber used for decorative or tying ribbon, etc. Olefin monofil includes the circular and rectangular ribbon cross sections plus spunbonded polypropylene. Olefin film fiber includes slit and split or fibrillated film.

For the purposes of this report, capacity data for miscellaneous fibers, such as saran and spandex, are not included.

NOTE: The increase in capacity for olefin yarn is due to a more thorough response and not because of additional capacity coming on stream.

GRAPH 1:
SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION, CAPACITY & CAPACITY UTILIZATION



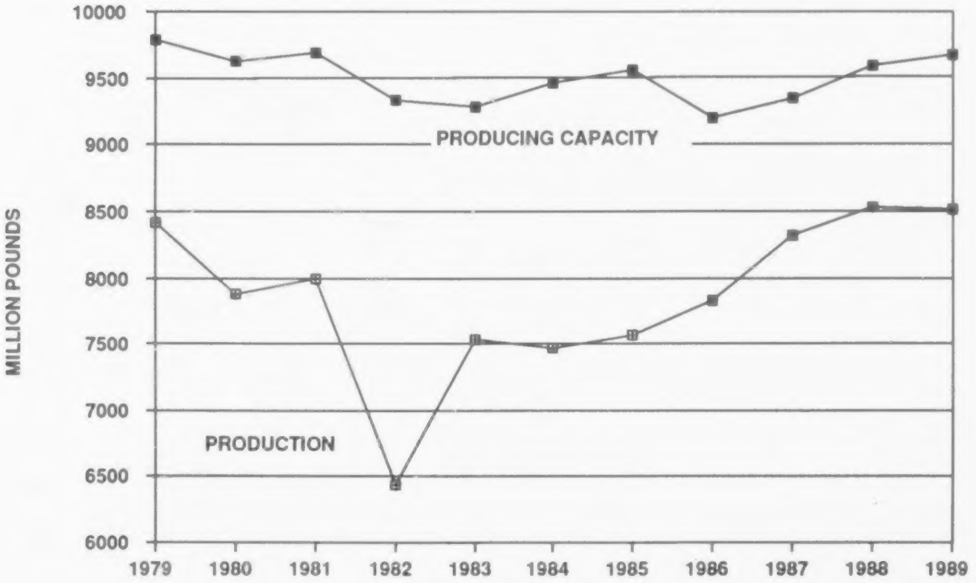


TABLE 5:
SUMMARY OF CAPACITY UTILIZATION RATES
PERCENT (%)

	ARTIFICIAL (CELLULOSIC) FIBERS						TOTAL ARTIFICIAL (CELLULOSIC)
	FILAMENT YARN+MONOFIL			STAPLE+TOW			
YEAR	RAYON	ACETATE	TOTAL	RAYON	ACETATE	TOTAL	
1979	76.0	89.3	87.0	81.8	87.5	81.9	**83.9**
1980	74.6	95.4	92.0	86.2	87.5	86.2	**88.7**
1981	92.3	77.4	79.4	90.6	80.0	90.5	**85.7**
1982	52.4	61.3	59.8	69.6	25.0	69.3	**65.3**
1983	57.1	85.1	79.8	73.5	25.0	73.2	**75.7**
1984	65.1	73.9	72.2	76.3	0	75.7	**74.3**
1985	b	b	76.2	b	b	68.5	**71.2**
1986	b	b	88.1	b	b	86.9	**87.3**
1987	b	b	78.3	b	b	89.0	**85.3**
1988	b	b	87.7	b	b	85.3	**86.1**
1989	b	b	94.0	b	b	NA	**NA**

	SYNTHETIC (NONCELLULOSIC) FIBERS [c]														TOTAL SYN. (NON-CELL.)
	YARN+MONOFILAMENTS									STAPLE+TOW					
	NYLON+ARAMID [a]				POLYESTER										
YEAR	IND	TEX	CARP	TOTAL	IND	TEX	TOTAL	OLEFIN	TOTAL YARN	NYLON+ ARAMID [a]	POLY-ESTER	ACRYLIC+ MODACR	OLEFIN+ VINYON [d]	TOTAL STAPLE	
1979	97.3	91.2	79.5	87.3	84.2	79.0	80.1	69.3	81.0	92.1	92.1	90.7	82.2	91.5	**86.0**
1980	84.9	84.6	80.0	82.5	71.5	71.8	71.8	70.2	75.8	73.4	91.6	93.9	86.6	88.0	**81.8**
1981	79.8	83.4	79.5	80.7	97.8	85.1	87.3	65.0	79.9	74.5	91.8	82.8	53.4	84.7	**82.4**
1982	66.5	69.0	61.9	65.0	86.4	72.8	75.7	56.4	66.8	70.0	72.4	75.0	50.9	71.2	**69.0**
1983	71.6	84.0	84.0	81.0	88.7	90.6	90.2	65.2	80.2	91.1	80.8	81.2	66.4	82.2	**81.2**
1984	86.7	83.8	86.8	86.0	92.4	76.1	79.8	65.5	78.7	79.2	78.7	83.1	74.4	79.3	**79.0**
1985	78.5	75.8	84.9	81.1	78.6	93.6	89.8	71.8	81.2	77.6	72.5	100.0	72.5	77.2	**79.1**
1986	77.9	90.5	94.1	89.4	79.6	83.6	82.5	79.8	84.4	84.3	85.6	96.7	73.3	85.6	**85.0**
1987	87.1	94.3	94.7	92.9	84.5	90.6	88.8	80.9	88.0	87.2	93.7	90.8	74.7	89.8	**88.9**
1988	89.5	90.5	91.9	91.0	90.0	88.9	89.2	83.3	88.1	82.8	94.9	91.6	74.9	89.6	**88.9**
1989	88.8	95.8	83.4	87.2	87.4	93.6	91.6	79.7	86.0	85.3	96.8	84.6	76.0	90.2	**88.0**

All percentages based on data in the tables on pages 4 and 5.

NA No Longer Available.

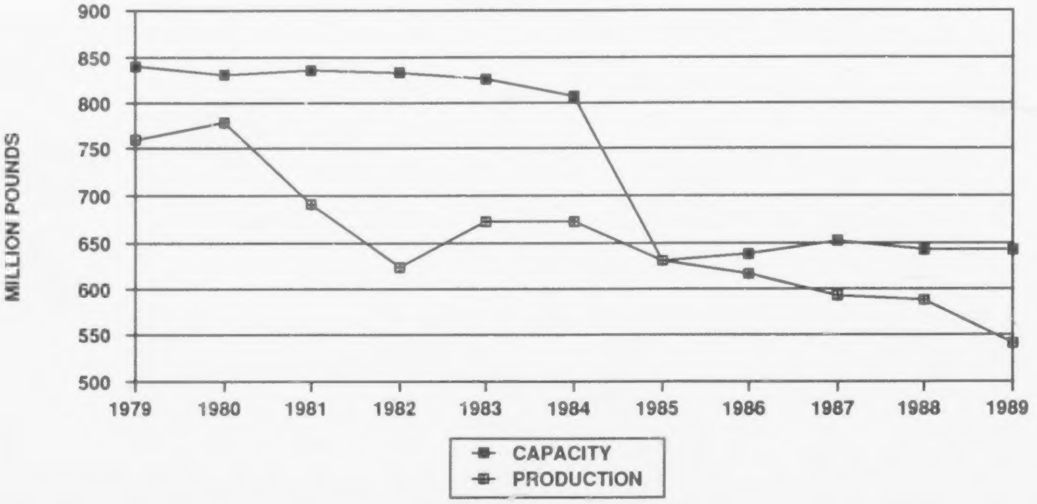
a. Data since 1982 do not include Aramid.

b. Detail withheld due to company disclosure.

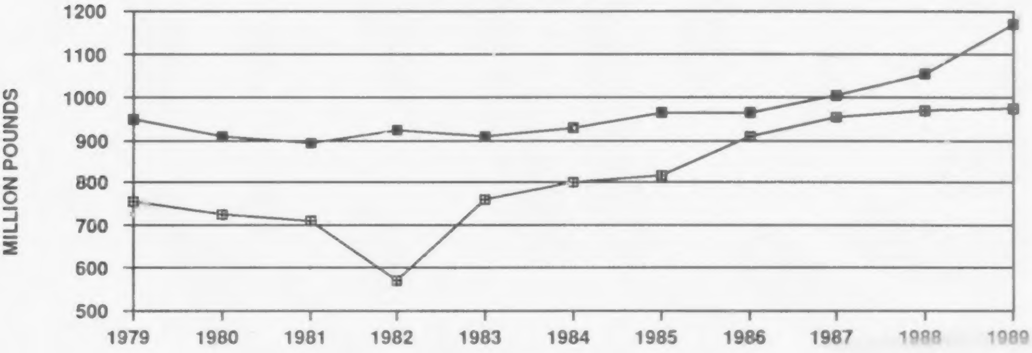
c. Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the January 1984 issue.

d. Data for Vinyon not included after 1986.

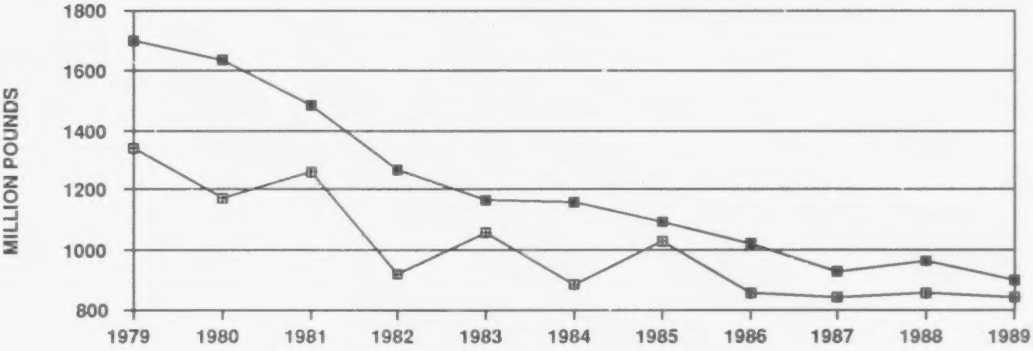
GRAPH 2:
ACRYLIC+MODACRYLIC STAPLE+TOW CAPACITY & PRODUCTION
MILLION POUNDS



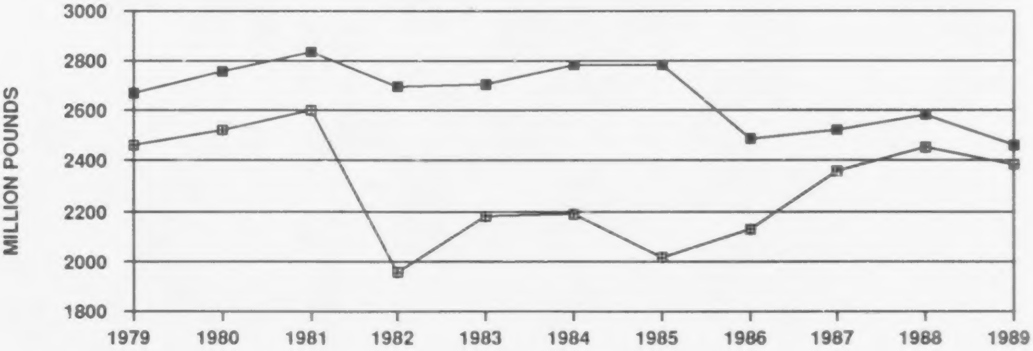
GRAPH 3:
NYLON CARPET YARN CAPACITY & PRODUCTION
MILLION POUNDS



GRAPH 4:
POLYESTER TEXTILE YARN CAPACITY & PRODUCTION [a]
MILLION POUNDS



GRAPH 5:
POLYESTER STAPLE+TOW CAPACITY & PRODUCTION
MILLION POUNDS



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[a] Includes low denier industrial.

TABLE 6:
PRODUCTION OF SYNTHETIC (NONCELLULOSIC) & ARTIFICIAL (CELLULOSIC) FIBERS[a] AS A PERCENTAGE OF TOTAL MANUFACTURED FIBER PRODUCTION
MILLION POUNDS & *PERCENT*

YEAR	SYNTHETIC (NON-CELLULOSIC)	%	ARTIFICIAL (CELLULOSIC)	%	TOTAL MANUFACTURED FIBER	%
1979	8418	*90.1*	930	*9.9*	9348	*100.0*
1980	7874	*90.7*	806	*9.3*	8680	*100.0*
1981	7985	*91.2*	770	*8.8*	8755	*100.0*
1982	6442	*91.7*	584	*8.3*	7026	*100.0*
1983	7534	*92.2*	640	*7.8*	8174	*100.0*
1984	7473	*92.2*	628	*7.8*	8101	*100.0*
1985	7564	*93.1*	558	*6.9*	8122	*100.0*
1986	7828	*92.7*	619	*7.3*	8447	*100.0*
1987	8316	*93.2*	605	*6.8*	8921	*100.0*
1988	8526	*93.3*	614	*6.7*	9140	*100.0*
1989	8515	*97.5*	218[b]	*2.5*	8733	*100.0*

a. Data on Glass Fiber are no longer available due to company disclosure.
The series including Glass Fiber was last published in the January 1984 issue.

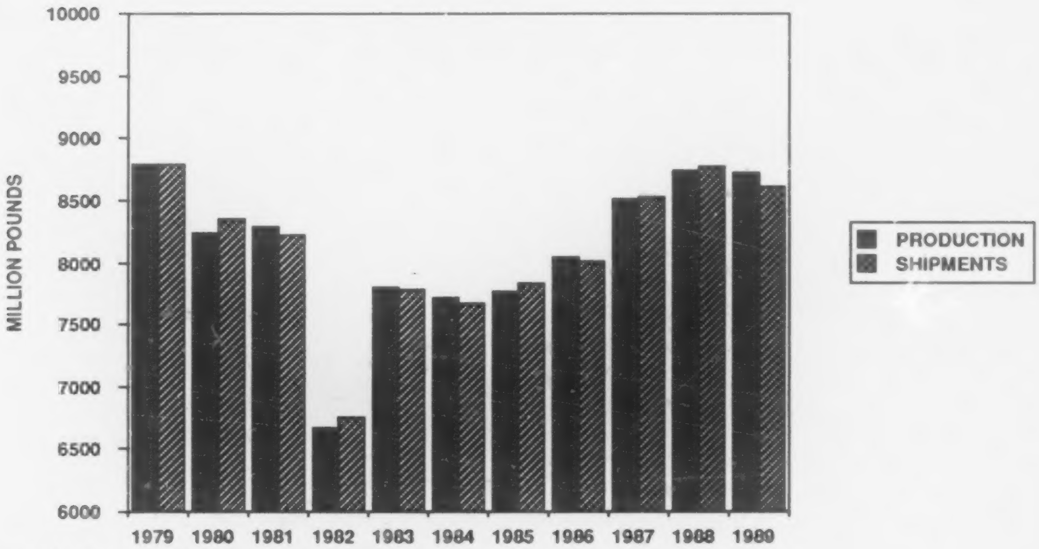
b. Data is for artificial (cellulosic) yarn only. Staple+tow data is no longer available.

TABLE 7:
PRODUCING CAPACITY OF SYNTHETIC (NONCELLULOSIC) & ARTIFICIAL (CELLULOSIC) FIBERS[a] AS A PERCENTAGE OF TOTAL MANUFACTURED FIBER CAPACITY
MILLION POUNDS & *PERCENT*

YEAR	SYNTHETIC (NON-CELLULOSIC)	%	ARTIFICIAL (CELLULOSIC)	%	TOTAL MANUFACTURED FIBER	%
1979	9784	*89.8*	1109	*10.2*	10893	*100.0*
1980	9627	*91.4*	909	*8.6*	10536	*100.0*
1981	9696	*91.5*	898	*8.5*	10594	*100.0*
1982	9334	*91.3*	895	*8.7*	10229	*100.0*
1983	9274	*91.6*	845	*8.4*	10119	*100.0*
1984	9460	*91.8*	845	*8.2*	10305	*100.0*
1985	9558	*92.4*	784	*7.6*	10342	*100.0*
1986	9207	*92.8*	709	*7.2*	9916	*100.0*
1987	9350	*93.0*	709	*7.0*	10059	*100.0*
1988	9592	*93.1*	713	*6.9*	10305	*100.0*
1989	9673	*93.0*	724	*7.0*	10397	*100.0*

a. Data on Glass Fiber are no longer available due to company disclosure.
The series including Glass Fiber was last published in the January 1984 issue.

GRAPH 6:
TOTAL MANUFACTURED FIBER PRODUCTION & SHIPMENTS [a]
MILLION POUNDS



a. Rayon staple data not included. Data is no longer available.

TABLE 8:
TOTAL MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1989	1988	% CHG. 1989/1988	1987	% CHG. 1989/1987	1986	% CHG. 1989/1986
ARTIFICIAL (CELLULOSIC)							
YARN	219.0	216.7	*+1.1*	191.7	*+14.2*	212.3	*+3.2*
RAYON STAPLE	NA	NA	*NA*	NA	*NA*	NA	*NA*
TOTAL ARTIFICIAL (CELLULOSIC)	**219.0**	**216.7**	***+1.1***	**191.7**	***+14.2***	**212.3**	***+3.2***
SYNTHETIC (NONCELLULOSIC)							
YARN+MONOFILAMENTS							
NYLON - INDUSTRIAL	364.6	375.2	*-2.8*	373.4	*-2.4*	333.4	*+9.4*
- CARPET	967.7	976.2	*-0.9*	941.6	*+2.8*	898.5	*+7.7*
- TEXTILE [a]	400.4	387.0	*+3.5*	378.8	*+5.7*	360.5	*+11.1*
POLYESTER - INDUSTRIAL	365.0	360.2	*+1.3*	338.8	*+7.7*	313.9	*+16.3*
- TEXTILE [a]	804.0	871.9	*-7.8*	841.5	*-4.5*	855.8	*-6.1*
OLEFIN	1251.0	1219.6	*+2.6*	1143.8	*+9.4*	1059.7	*+18.1*
TOTAL YARN	**4152.7**	**4190.1**	***-0.9***	**4017.9**	***+3.4***	**3821.8**	***+8.7***
STAPLE+TOW+FIBERFILL							
NYLON	978.5	963.9	*+1.5*	985.5	*-0.7*	908.2	*+7.7*
ACRYLIC+MODACRYLIC	537.2	590.2	*-9.0*	594.4	*-9.6*	614.1	*-12.5*
POLYESTER	2353.5	2448.9	*-3.9*	2369.2	*-0.7*	2123.4	*+10.8*
OLEFIN+VINYON [b]	375.4	363.8	*+3.2*	363.9	*+3.2*	331.5	*+13.2*
TOTAL STAPLE	**4244.6**	**4366.8**	***-2.8***	**4313.0**	***-1.6***	**3977.2**	***+6.7***
TOTAL SYNTHETIC (NONCELLULOSIC)	**8397.3**	**8556.9**	***-1.9***	**8330.9**	***+0.8***	**7799.0**	***+7.7***
TOTAL MANUFACTURED FIBER	**8616.3**	**8773.6**	***-1.8***	**8522.6**	***+1.1***	**8011.3**	***+7.6***

NA No Longer Available

a. Includes low denier industrial yarn.

b. Excludes Vinyon after 1986.

TABLE 9:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	0	0	6	1	4	0	139	0	37	112	134		433	
BRAZIL	53	110	55	0	54	76	22	53	53	26	0		502	
CANADA	745	619	686	613	656	532	399	634	533	747	629		6793	
CHILE	44	22	22	22	22	44	48	0	44	0	0		268	
GERMANY, FED. REP. OF	784	515	697	452	436	362	521	928	784	964	1389		7832	
IRELAND	37	0	36	138	34	36	107	69	104	0	70		631	
JAPAN	55	121	122	185	110	206	57	81	72	42	71		1122	
KOREA, REP. OF	66	22	0	56	0	22	11	3	0	14	0		194	
MEXICO	156	99	171	45	153	144	213	141	169	124	122		1537	
NETHERLANDS	61	239	261	173	204	380	262	413	302	382	292		2969	
UNITED KINGDOM	75	68	113	135	75	66	84	40	71	47	55		829	
ALL OTHER COUNTRIES [a]	40	24	30	8	168	62	363	79	232	16	11		1033	
TOTAL ARTIFICIAL YARN	**2116**	**1839**	**2199**	**1828**	**1916**	**1930**	**2226**	**2441**	**2401**	**2474**	**2773**		**24143**	**15790**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	323	422	377	226	381	430	394	568	39	482	206		3848	
CANADA	4757	1990	4093	3462	3409	2370	1638	4140	3000	3512	3766		36137	
CHINA, PRC	104	0	369	0	752	0	110	0	0	0	111		1446	
GERMANY, DEM. REP.	0	0	95	43	82	80	44	0	0	0	0		344	
GERMANY, FED. REP. OF	68	67	95	116	124	142	208	179	236	183	126		1544	
JAPAN	150	521	422	263	107	60	84	61	174	147	139		2128	
SWITZERLAND	9	25	41	37	65	40	286	7	14	37	32		593	
TAIWAN	28	0	28	88	320	0	264	176	0	176	183		1263	
UNITED KINGDOM	265	225	1	47	69	42	67	135	130	190	45		1216	
ALL OTHER COUNTRIES [b]	273	241	123	138	111	255	42	261	126	239	131		1940	
TOTAL ARTIFICIAL STAPLE+TOW	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**	**4966**	**4739**		**50459**	**17666**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	30	46	0	11	38	1479	1	959	774	0		3338	
BELGIUM	0	56	115	171	343	236	568	685	399	323	492		3388	
BRAZIL	106	63	170	30	140	201	57	191	92	114	49		1213	
CANADA	3437	2926	2969	2399	3327	3304	2445	3580	3717	3978	3167		35249	
COSTA RICA	252	487	591	433	415	517	537	515	657	541	319		5264	
ECUADOR	91	26	144	0	58	23	71	33	33	36	117		632	
FRANCE	1180	1151	1079	1159	1159	1085	972	799	516	1432	794		11326	
GERMANY, FED. REP. OF	2231	2204	2641	2514	2357	3691	2202	1988	2515	1844	2492		26679	
ISRAEL	299	217	172	149	285	244	117	124	103	98	91		1899	
ITALY	924	323	873	859	1031	132	489	526	620	568	546		6891	
JAPAN	469	610	568	609	548	502	845	1110	960	1304	1084		8609	
KOREA, REP. OF	10	49	7	81	98	42	89	0	59	17	97		549	
MEXICO	1447	2222	2385	1857	2527	2911	2490	2806	2210	1691	1060		23606	
NETHERLANDS	68	193	267	338	69	63	398	104	7	381	38		1926	
SINGAPORE	0	25	0	33	0	33	16	16	16	0	30		169	
TAIWAN	50	175	650	1296	2844	3217	3133	2680	1259	1138	1183		17625	
THAILAND	65	64	69	67	63	171	124	142	70	96	95		1026	
UNITED KINGDOM	1482	1357	1409	1649	1790	1506	1635	2014	1437	2234	1841		18354	
ALL OTHER COUNTRIES [c]	36	175	221	260	67	330	189	324	443	196	310		2551	
TOTAL SYNTHETIC YARN	**12147**	**12353**	**14376**	**13904**	**17132**	**18246**	**17856**	**17638**	**16072**	**16765**	**13805**		**170294**	**107392**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	3	9	13	1	0	79	0	11	2	57		175	
AUSTRALIA	31	160	1	82	16	43	149	78	0	134	24		718	
BELGIUM	47	99	60	56	67	7	7	378	35	368	16		1140	
CANADA	1413	737	1481	1489	1292	874	622	818	1242	1417	2143		13528	
FRANCE	230	304	253	405	388	336	136	519	102	573	416		3662	
GERMANY, FED. REP. OF	1985	1758	1318	1293	1491	1780	1084	2057	753	1440	1287		16246	
INDIA	0	0	3772	3400	709	49	1772	2893	3690	992	0		17277	
IRELAND	280	480	305	348	0	36	0	0	0	0	39		1488	
ITALY	482	394	206	46	61	34	70	193	264	217	217		2184	
JAPAN	1773	1757	2303	2770	2429	1826	1929	2894	1648	2554	2166		24049	
KOREA, REP. OF	2297	3387	3933	4165	5687	4876	4806	2638	3190	4035	1270		40284	
MEXICO	1049	372	420	1016	783	462	579	797	434	464	1599		7975	
NETHERLANDS	31	103	99	81	56	105	21	617	365	44	3		1525	
SPAIN	8	0	178	39	65	128	0	0	0	34	0		452	
SWITZERLAND	146	165	134	166	125	42	242	214	88	128	305		1755	
TAIWAN	262	235	215	808	917	2057	2093	1994	4020	3424	6973		22998	
TURKEY	18	0	0	0	111	37	90	105	0	269	162		792	
UNITED KINGDOM	2318	2304	1643	2107	2671	1229	1645	810	1535	1139	1100		18501	
ALL OTHER COUNTRIES [d]	2	53	45	56	29	28	0	241	111	42	205		812	
TOTAL SYNTHETIC STAPLE+TOW	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**	**17276**	**17982**		**175561**	**180168**

a. Belgium 617, Italy 134, Taiwan 68, China, PRC 51, France 46, Greece 41, Norway 32, Singapore 23, Egypt 21.

b. Poland 359, Finland 274, Australia 217, Italy 193, Romania 175, Korea, Rep. of 171, France 147, Sweden 131, Belgium 73, Spain 47, Chile 46, Norway 40, Peru 37, India 18, Thailand 11, Mexico 1.

c. Ireland 812, Portugal 342, Egypt 258, Turkey 201, Peru 182, Austria 124, Spain 92, Romania 86, China, PRC 82, Switzerland 75, El Salvador 56, Australia 51, Nigeria 35, Hong Kong 31, Sweden 27, Morocco 26, Colombia 21, Honduras 20, Greece 11, Denmark 9, Finland 6, Haiti 2, Norway 1, Yugoslavia 1.

d. Romania 243, Israel 169, Indonesia 132, Hong Kong 92, Brazil 85, Malaysia 44, Germany Dem. Rep. 42, Thailand 3, China, PRC 2.

Effective January 1, 1989 the U.S. Manufactured Imports for Consumption by Country of Origin are based on the new Harmonized System (HS). On pages 73 through 79 of the *Fiber Organon*, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

Selected U.S. Manufactured Imports for Consumption by Country of Origin for 1988 are published in the *Textile Organon*, February 1989 issue, page 31.

TABLE 10:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	114	266	408	205	111	192	176	252	148	175	202		2249	
TEXTURED	180	1	0	24	0	27	497	58	275	222	65		1349	
OTHER	1726	1532	1671	1449	1732	1673	1402	2036	1873	2048	2433		19575	
MONOFILAMENTS & STRIPS	96	40	120	150	73	38	151	95	105	29	73		970	
SUBTOTAL ABOVE	**2116**	**1839**	**2199**	**1828**	**1916**	**1930**	**2226**	**2441**	**2401**	**2474**	**2733**		**24143**	**15790**
STAPLE	5924	3481	5624	4403	5312	3419	3113	5451	3512	4825	4631		49695	
TOW	47	0	0	7	103	0	24	72	207	141	108		709	
TOPS	6	10	20	10	5	0	0	4	0	0	0		55	
SUBTOTAL ABOVE	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**	**4966**	**4739**		**50459**	**17666**
WASTE	**18**	**122**	**47**	**213**	**0**	**0**	**0**	**94**	**44**	**0**	**0**		**538**	**5**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1037	1093	1506	1578	1829	1964	1480	1706	1698	2290	1692		17873	
TEXTURED														
UP TO 450 DENIER	385	217	359	285	319	315	333	428	270	234	237		3382	
OVER 450 DENIER	1311	1054	1428	1294	1241	654	943	865	1164	1360	1191		12505	
OTHER	3820	3306	3786	3845	4296	5210	4007	4096	3664	3623	3627		43280	
MONOFILAMENTS & STRIPS	72	159	58	113	143	116	120	63	89	132	176		1241	
SUBTOTAL ABOVE	**6625**	**5829**	**7137**	**7115**	**7828**	**8259**	**6883**	**7158**	**6885**	**7639**	**6923**		**78281**	**34586**
POLYESTER														
HIGH TENACITY	957	880	909	488	797	703	361	603	557	686	445		7386	
TEXTURED	883	1673	1738	1766	1775	2385	1747	2230	1822	1231	911		18161	
POY	0	40	642	1088	2744	3214	3170	2407	989	621	936		16051	
OTHER	1152	1481	1719	1740	1324	1567	1551	1815	1487	2012	1968		17816	
MONOFILAMENTS & STRIPS	65	80	34	55	24	70	73	65	171	27	50		714	
SUBTOTAL ABOVE	**3057**	**4154**	**5042**	**5137**	**6664**	**7939**	**6902**	**7120**	**5026**	**4777**	**4310**		**60128**	**33698**
OTHER SYNTHETIC FILAMENT														
TEXTURED	2057	1685	1550	1054	2074	1555	1199	1981	1981	2030	1407		18573	
OTHER	261	386	339	274	171	136	1049	1015	944	1276	808		6659	
MONOFILAMENTS & STRIPS	147	299	308	324	395	357	1823	364	1236	1043	357		6653	
SUBTOTAL ABOVE	**2465**	**2370**	**2197**	**1652**	**2640**	**2048**	**4071**	**3360**	**4161**	**4349**	**2572**		**31885**	**39108**
STAPLE														
NYLON	1726	1896	1845	1592	1422	1273	1445	1611	1396	2017	2716		18939	
POLYESTER	5584	5594	10047	10627	10327	8674	9941	11597	12729	10748	11419		107287	
ACRYLIC	1934	1028	1576	1518	1206	1511	1335	2194	839	1868	1509		16518	
POLYPROPYLENE	44	55	197	351	93	220	298	55	150	374	148		1985	
OTHER	172	1040	651	740	167	165	259	245	83	272	371		4165	
TOW														
NYLON	237	433	257	504	341	315	225	524	221	623	406		4086	
POLYESTER	47	78	131	49	140	114	31	32	203	102	0		927	
ACRYLIC	2023	1709	1127	2522	2868	1462	1574	837	1751	1197	1235		18305	
OTHER	117	120	146	0	0	14	0	15	0	0	15		427	
TOPS	488	358	398	437	334	201	216	136	116	75	163		2922	
SUBTOTAL ABOVE	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**	**17276**	**17982**		**175561**	**180168**
WASTE														
NYLON	1971	1804	1754	2087	1949	2027	1769	2266	1265	2170	2724		21786	
POLYESTER	999	340	730	1029	846	973	1475	2106	1821	1942	2028		14289	
OTHER	396	725	477	486	547	389	326	675	897	850	754		6522	
TOTAL MANUFACTURED FIBERS ABOVE	**35996**	**32985**	**41602**	**42307**	**44708**	**40933**	**42113**	**47993**	**43707**	**46443**	**44805**		**463592**	**358692**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	229	84	46	26	74	73	105	171	124	196	132		1262	
SPUN YARN	492	396	370	287	418	406	466	798	368	374	412		4787	
SPUN YARNS														
SYNTHETIC	517	686	517	258	677	1019	937	801	902	755	529		7598	
ARTIFICIAL	0	0	0	0	0	0	0	0	0	0	0		0	
PUT UP FOR RETAIL SALE	71	50	27	37	74	39	128	63	21	32	26		568	
GRAND TOTAL ABOVE	**37305**	**34201**	**42562**	**42915**	**45951**	**42470**	**43749**	**49826**	**45122**	**47802**	**45904**		**477807**	**432294**

SOURCE: U.S. Census Bureau Report IM145X.

Effective January 1,1989 the U.S. Imports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Imports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 32.

TABLE 11:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

	1989												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	9	13	45	26	30	16	74	117	78	82	66		556	
TEXTURED	463	17	29	1	29	28	1009	26	26	0	16		1644	
OTHER	694	63	18	60	21	15	51	30	6	5	3		966	
MONOFILAMENTS & STRIPS	90	0	7	93	5	9	21	12	2	8	34		281	
SUBTOTAL ABOVE	**1256**	**93**	**99**	**180**	**85**	**68**	**1155**	**185**	**112**	**95**	**119**		**3447**	**11590**
STAPLE	2827	1786	1325	920	1659	1786	2084	2167	1495	835	1112		17996	
TOPS	94	0	8	129	53	48	7	101	133	0	0		573	
SUBTOTAL ABOVE	**2921**	**1786**	**1333**	**1049**	**1712**	**1834**	**2091**	**2268**	**1628**	**835**	**1112**		**18569**	**22883**
WASTE	**1303**	**559**	**1587**	**1116**	**1635**	**1108**	**1021**	**551**	**491**	**674**	**969**		**11014**	**1877**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	9331	9410	7884	16614	6326	6999	11613	7987	7577	6351	9433		99525	
TEXTURED														
UP TO 450 DENIER	522	586	719	666	819	1271	488	856	954	951	585		8417	
OVER 450 DENIER	4706	5051	5459	4430	4096	3626	3176	4030	3042	4025	3684		45325	
OTHER	2038	2103	2133	2188	2571	2003	1669	2028	1758	2422	2077		22990	
MONOFILAMENTS & STRIPS	239	258	187	131	204	303	282	134	27	45	33		1843	
SUBTOTAL ABOVE	**16836**	**17408**	**16382**	**24029**	**14016**	**14202**	**17228**	**15035**	**13358**	**13794**	**15812**		**178100**	**148687**
POLYESTER														
HIGH TENACITY	3031	3122	2773	3282	4214	4080	3334	3490	2679	4170	2317		36492	
TEXTURED	3651	3677	2385	2939	3208	3577	1341	2557	2583	2683	2938		31539	
POY	939	1250	2204	1446	629	528	2782	289	655	4749	624		16095	
OTHER	1007	584	829	983	777	1186	933	722	975	738	1004		9738	
MONOFILAMENTS & STRIPS	208	213	203	132	302	332	275	346	353	237	338		2939	
SUBTOTAL ABOVE	**8836**	**8846**	**8394**	**8782**	**9130**	**9703**	**8665**	**7404**	**7245**	**12577**	**7221**		**96803**	**83784**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1033	457	872	903	992	634	980	995	603	439	544		8452	
OTHER	1342	1471	1735	1730	1559	1332	1724	1527	1938	2032	2586		18976	
MONOFILAMENTS & STRIPS	486	421	771	1317	927	987	687	860	675	538	726		8395	
SUBTOTAL ABOVE	**2861**	**2349**	**3378**	**3950**	**3478**	**2953**	**3391**	**3382**	**3216**	**3009**	**3856**		**35823**	**41785**
STAPLE														
NYLON	2605	3265	3262	2629	3280	3985	2532	1797	2075	2333	1980		29743	
POLYESTER	14048	10762	12940	12923	10675	7497	8203	8432	6815	7025	5725		105045	
ACRYLIC	3326	5674	6643	6896	6342	9369	8569	6419	4571	7585	4605		69999	
POLYPROPYLENE	1336	1569	1129	2264	2714	2477	1995	1454	8124	1791	1402		26255	
OTHER	836	2036	1489	2562	1734	1757	2004	1412	2180	1363	1381		18754	
TOW														
NYLON	31	50	50	108	141	86	56	61	32	31	264		910	
POLYESTER	37	564	472	634	7	621	541	113	319	283	544		4135	
ACRYLIC	1037	1761	2185	3302	1467	829	1070	899	1013	3056	1394		18013	
OTHER	161	16	34	503	9	7	77	13	213	5	217		1255	
TOPS	847	964	1224	2191	3092	1230	1557	3000	2448	1206	4015		21774	
SUBTOTAL ABOVE	**24264**	**26661**	**29428**	**34012**	**29461**	**27858**	**26604**	**23600**	**27790**	**24678**	**21527**		**295883**	**420429**
WASTE														
NYLON	2127	2118	2159	2883	2102	2007	1852	2750	2640	2829	3296		26763	
POLYESTER	4369	3980	3189	5535	3685	2726	3631	2444	3115	4007	2808		39489	
OTHER	5113	6957	8080	6731	7071	5876	8304	5850	3966	4580	4330		66858	
TOTAL MANUFACTURED FIBERS ABOVE	**69886**	**70757**	**74029**	**88267**	**72375**	**68335**	**73942**	**63469**	**63561**	**67078**	**61050**		**772749**	**807958**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	13	51	43	74	9	93	41	77	46	141	69		657	
SPUN YARN	0	0	0	0	0	0	0	0	0	0	0		0	
SPUN YARNS														
SYNTHETIC	732	959	1152	1172	1944	1089	856	1532	1452	1016	860		12764	
ARTIFICIAL	0	0	0	0	0	0	0	0	2	0	0		2	
PUT UP FOR RETAIL SALE	606	740	923	580	532	435	536	704	521	1026	731		7334	
GRAND TOTAL ABOVE	**71237**	**72507**	**76147**	**90093**	**74860**	**69952**	**75375**	**65782**	**65582**	**69261**	**62710**		**793506**	

SOURCE: U.S. Census Bureau Report EM522.

Effective January 1,1989 the U.S. Exports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Exports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 33.

TABLE 12:
1988 MANUFACTURED FIBER PRODUCTION, IMPORT, EXPORT & NET AVAILABLE SUPPLY BY COUNTRY EXCEPT OLEFIN & GLASS FIBER

MILLION POUNDS

	ARTIFICIAL (CELLULOSIC)								SYNTHETIC (NONCELLULOSIC)								TOTAL MANUFACTURED FIBERS					
	YARN				STAPLE+TOW				YARN				STAPLE+TOW							ART.	SYN.	NET
COUNTRY & AREA	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	SPUN	SPUN	AVAIL
WESTERN EUROPE																						
AUSTRIA	NA	7.5	1.9	NA	NA	4.8	159.9	NA	0	45.9	4.1	41.8	38.4	49.7	49.6	38.5	329.4	107.9	215.5	-50.1	-16.2	155.5
BENELUX	NA	32.5	84.0	NA	NA	108.5	16.4	NA	154.1	401.1	359.2	196.0	68.6	266.5	129.4	205.7	313.1	808.6	589.0	+29.4	+49.5	611.6
FINLAND	NA	1.3	+	NA	NA	5.8	82.9	NA	0	28.4	0.2	28.2	0	26.4	0.3	26.1	133.4	61.9	83.4	+1.3	+7.8	121.0
FRANCE	NA	63.3	27.7	NA	NA	68.3	23.2	NA	124.8	220.1	113.6	231.3	256.6	240.5	144.3	352.8	414.5	592.2	308.8	+27.4	+30.3	755.6
GERMANY, FED. REP. OF	NA	50.9	73.7	NA	NA	128.6	90.4	NA	801.4	203.3	487.3	517.4	918.2	289.0	872.1	335.1	1988.6	671.8	1523.5	+8.5	-19.2	1126.2
GREECE	NA	0.5	9.9	NA	NA	NA	NA	NA	21.2	14.2	8.5	26.9	18.7	51.0	7.8	61.9	54.9	65.7	26.2	+0.2	+10.4	105.0
IRELAND	0	1.0	0.6	0.4	0	5.9	0.1	5.8	28.7	23.4	38.6	13.5	145.9	12.5	150.8	7.6	174.6	42.8	190.1	+1.0	+1.7	30.0
ITALY/MALTA	NA	62.0	27.1	NA	NA	137.4	4.6	NA	369.9	197.0	309.1	257.8	845.2	360.7	717.5	488.4	1285.6	757.1	1058.3	+37.1	-86.5	935.0
NORWAY	0	0.3	+	0.3	0	3.1	0.5	2.6	0	9.6	1.7	7.9	0	5.7	0.1	5.6	0	18.7	2.3	+0.3	+1.8	18.5
PORTUGAL	NA	5.9	1.1	NA	NA	20.8	0.1	NA	0	66.5	10.3	56.2	119.7	34.0	10.5	143.2	121.2	127.2	22.0	-0.4	+3.5	229.5
SPAIN	NA	19.3	5.9	NA	NA	49.9	23.6	NA	175.5	76.0	36.7	214.8	416.2	129.4	255.0	290.6	673.3	274.6	321.2	+0.3	-19.4	607.6
SWEDEN	NA	3.2	4.3	NA	NA	9.2	39.0	NA	0	30.1	1.0	29.1	0	30.3	1.3	29.0	44.1	72.8	45.6	+0.6	+7.1	79.0
SWITZERLAND	0	4.5	1.3	3.2	0	18.9	1.2	17.7	159.2	19.7	158.5	20.4	51.6	28.3	74.7	5.2	210.8	71.4	235.7	-1.0	+4.3	49.8
TURKEY	NA	0.6	0.2	NA	NA	1.0	0.2	NA	169.8	48.7	33.8	184.7	451.9	62.2	59.1	455.0	640.9	112.5	93.3	-0.8	-25.2	634.1
UNITED KINGDOM	NA	24.9	24.1	NA	NA	57.3	67.3	NA	179.5	293.2	170.8	301.9	254.9	265.3	60.3	459.9	575.5	640.7	322.5	+1.7	+82.1	977.5
TOTAL WESTERN EUROPE	**414.9**	**277.7**	**261.8**	**430.8**	**775.0**	**619.5**	**509.4**	**885.1**	**2184.1**	**1677.2**	**1733.4**	**2127.9**	**3585.9**	**1851.5**	**2532.8**	**2904.6**	**6959.9**	**4425.9**	**5037.4**	**+55.5**	**+32.0**	**6435.9**
EASTERN EUROPE																						
ALBANIA	0	+	0	0	0	0	0	0	1.1	0.1	+	1.2	0	2.9	0	2.9	1.1	3.0	0	0	+0.1	4.2
BULGARIA	9.7	0.1	0	9.8	52.9	5.0	0.2	57.7	90.2	3.6	1.1	92.7	108.0	11.3	0.3	119.0	260.8	20.0	1.6	0	+0.2	279.4
CZECHOSLOVAKIA	41.0	0.1	0.6	40.5	81.6	0.1	4.2	77.5	203.7	3.8	11.9	195.6	105.8	6.6	5.1	107.3	432.1	10.6	21.8	+0.1	+3.4	424.4
GERMANY, DEM. REP.	80.0	1.2	+	81.2	275.1	0.2	20.2	255.1	184.7	3.5	5.6	182.6	185.6	5.8	13.0	178.4	725.4	10.7	38.8	+4.2	+12.1	713.6
HUNGARY	0	1.0	0.3	0.7	10.8	0.7	6.4	5.1	18.5	9.6	1.2	26.9	39.9	19.6	0.5	59.0	69.2	30.9	8.4	-2.4	-0.6	88.7
POLAND	45.0	+	0.9	44.1	119.0	2.3	0.1	121.2	198.4	9.0	3.0	204.4	111.1	25.2	0.6	135.7	473.5	36.5	4.6	0	+2.5	507.9
ROMANIA	20.1	0	+	20.1	146.6	0	20.6	126.0	131.0	0.2	5.3	125.9	316.6	0	21.2	295.4	614.3	0.2	47.1	-0.1	-2.7	564.6
U.S.S.R.	581.6	14.1	0.7	595.0	743.4	15.4	0.5	758.3	1009.0	63.5	0.3	1072.2	905.6	38.3	3.3	940.6	3239.6	131.3	4.8	+0.1	+3.8	3370.0
YUGOSLAVIA	30.9	6.1	8.9	28.1	119.0	0.8	18.1	101.7	94.4	34.5	13.6	115.3	127.4	20.7	50.1	98.0	371.7	62.1	90.7	-12.7	+0.3	330.7
TOTAL EASTERN EUROPE	**808.3**	**22.6**	**11.4**	**819.5**	**1548.4**	**24.5**	**70.3**	**1502.6**	**1931.0**	**127.8**	**42.0**	**2016.8**	**1900.0**	**130.4**	**94.1**	**1936.3**	**6187.7**	**305.3**	**217.8**	**-10.8**	**+19.1**	**6283.5**
TOTAL EUROPE	**1223.2**	**300.3**	**273.2**	**1250.3**	**2323.4**	**644.0**	**579.7**	**2387.7**	**4115.1**	**1805.0**	**1775.4**	**4144.7**	**5485.9**	**1981.9**	**2626.9**	**4840.9**	**13147.6**	**4731.2**	**5255.2**	**+44.7**	**+51.1**	**12719.4**
U.S.A.	**213.9**	**17.6**	**12.7**	**218.8**	**400.3**	**20.4**	**24.6**	**396.1**	**2956.2**	**116.3**	**297.1**	**2775.4**	**3981.6**	**196.2**	**399.1**	**3778.7**	**7552.0**	**350.5**	**733.5**	**-0.6**	**+3.9**	**7172.3**
CANADA	**20.5**	**26.5**	**23.0**	**24.0**	**72.3**	**3.3**	**50.6**	**25.0**	**166.0**	**149.4**	**78.8**	**236.6**	**129.2**	**87.1**	**21.7**	**194.6**	**388.0**	**266.3**	**174.1**	**+0.2**	**+64.4**	**544.8**
OTHER AMERICAS																						
ARGENTINA	6.6	0.4	0.1	6.9	0	+	0	+	59.7	0.5	0	60.2	47.6	3.1	0	50.7	113.9	4.0	0.1	0	0	117.8
BOLIVIA	0	+	0	+	0	0	0	0	0	0	0	0	0	1.9	0	1.9	0	1.9	0	0	0	1.9
BRAZIL	32.8	5.7	9.5	29.0	80.7	3.3	17.9	66.1	277.3	5.5	3.4	279.4	251.1	1.3	1.7	250.7	641.9	15.8	32.5	0	-24.1	601.1
CHILE	2.9	+	0.3	2.6	9.0	1.2	0	10.2	10.1	0.8	0	10.9	6.2	36.2	0	42.4	28.2	38.2	0.3	0	0	66.1
COLOMBIA	5.3	+	0	5.3	0	2.6	0	2.6	86.4	1.1	0	87.5	22.9	6.5	0	29.4	114.6	10.2	0	0	✓	124.8
COSTA RICA	0	0	0	0	0	+	0	+	9.5	1.2	6.7	4.0	0	4.4	0	4.4	9.5	5.6	6.7	0	0	8.4
CUBA	1.5	0	0.1	1.4	19.6	0	0	19.6	0	0.3	0	0.3	0	0.1	0.3	-0.2	21.1	0.4	0.4	0	0	21.1
ECUADOR	0	0.3	0	0.3	0	1.0	0	1.0	14.3	2.0	0	16.3	0	13.0	0	13.0	14.3	16.3	0	0	0	30.6
MEXICO	27.6	0.2	1.1	26.7	0	15.3	0.1	15.2	334.9	4.5	40.0	299.4	425.5	20.8	20.4	425.9	788.0	40.8	61.6	+0.2	-18.6	748.8
PERU	2.9	+	0	2.9	0	0.2	0	0.2	29.5	0.8	0	30.3	71.2	0.5	0	71.7	103.6	1.5	0	0	0	105.1
URUGUAY	2.9	0.1	0	3.0	0	+	0	+	4.6	0.1	0	4.7	7.9	0.8	0	8.7	15.4	1.0	0	0	0	16.4
VENEZUELA	4.9	0.1	0	5.0	0	10.9	0	10.9	33.9	3.4	0	43.3	26.5	5.9	0	32.4	71.3	20.3	0	+0.5	0	92.1
TOTAL OTHER AMERICAS	**87.4**	**6.8**	**11.1**	**83.1**	**109.3**	**34.5**	**18.0**	**125.8**	**866.2**	**20.2**	**50.1**	**836.3**	**858.9**	**94.5**	**22.4**	**931.0**	**1921.8**	**156.0**	**101.6**	**+0.7**	**-42.7**	**1934.2**

TABLE 12:
1988 MANUFACTURED FIBER PRODUCTION, IMPORT, EXPORT & NET AVAILABLE SUPPLY BY COUNTRY EXCEPT OLEFIN & GLASS FIBER *(CONTINUED)*

MILLION POUNDS

	ARTIFICIAL (CELLULOSIC)								SYNTHETIC (NONCELLULOSIC)								TOTAL MANUFACTURED FIBERS					
	YARN				STAPLE+TOW				YARN				STAPLE+TOW							ART.	SYN.	NET
COUNTRY & AREA	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	AVAIL	PROD	IMP	EXP	SPUN	SPUN	AVAIL
JAPAN	**220.0**	**4.0**	**83.9**	**140.1**	**420.6**	**0.5**	**194.6**	**226.5**	**1364.4**	**125.6**	**215.1**	**1274.9**	**1616.0**	**63.3**	**592.4**	**1086.9**	**3621.0**	**193.4**	**1086.0**	**-1.8**	**+0.9**	**2727.5**
CHINA, PRC	**110.2**	**49.7**	**+**	**159.9**	**242.5**	**193.2**	**0**	**435.7**	**639.3**	**193.8**	**0**	**833.1**	**1494.7**	**994.7**	**0**	**2489.4**	**2486.7**	**1431.4**	**0**	**-38.5**	**+53.8**	**3933.4**
OTHER ASIA																						
BANGLADESH	2.6	+	0	2.6	2.4	1.7	0	4.1	1.3	0.6	0	1.9	0	1.0	0	1.0	6.3	3.3	0	0	0	9.6
HONG KONG	0	5.6	+	5.6	0	11.9	0	11.9	0	10.8	+	10.8	0	50.4	0.1	50.3	0	78.7	0.1	0.5	0	79.1
INDIA	116.0	5.6	3.2	118.4	267.9	1.3	0	269.2	440.3	28.9	0	469.2	267.9	19.3	15.1	272.1	1092.1	55.1	18.3	-2.5	-6.2	1120.2
INDONESIA	0	25.4	+	25.4	113.3	5.9	0.8	118.4	221.8	51.5	7.0	266.3	190.9	99.2	0.8	289.3	526.0	182.0	8.6	-2.9	-9.9	686.6
KOREA, REP. OF	33.5	37.6	5.1	66.0	0	45.8	0.2	45.6	1278.9	86.4	117.8	1247.5	1178.8	79.8	300.8	957.8	2491.2	249.6	423.9	+13.1	-33.7	2296.3
MALAYSIA	0	2.4	+	2.4	0	16.8	0.2	16.6	0	1.3	0.4	0.9	106.3	17.6	2.8	121.1	106.3	38.1	3.4	-0.1	-5.9	135.0
PAKISTAN	7.3	4.8	0.2	11.9	0	34.9	0.1	34.8	68.6	13.8	0.2	82.2	59.3	23.9	0	83.2	135.2	77.4	0.5	+0.5	-2.5	210.1
PHILIPPINES	0	0.1	0	0.1	0	9.8	0	9.8	52.9	5.6	+	58.5	30.9	23.4	0	54.3	83.8	38.9	0	0	0	122.7
SRI LANKA	0	0.1	0	0.1	0	2.7	0	2.7	3.3	0.9	0	4.2	0	0.1	0	0.1	3.3	3.8	0	0	0	7.1
TAIWAN	5.7	4.6	3.8	6.5	271.6	12.0	76.9	206.7	1615.3	32.8	598.4	1049.7	1537.7	115.8	576.2	1077.3	3430.3	165.2	1255.3	-4.8	-203.1	2132.3
THAILAND	0	0.4	+	0.4	52.9	2.6	0	55.5	123.5	3.9	3.4	124.0	164.0	17.0	0	181.0	340.4	23.9	3.4	-6.3	-6.5	348.1
TOTAL OTHER ASIA	165.1	86.6	12.3	239.4	708.1	145.4	78.2	775.3	3805.9	236.5	727.2	3315.2	3535.8	447.5	895.8	3087.5	8214.9	916.0	1713.5	-2.5	-267.8	7147.1
MIDDLE EAST, AFRICA & OCEANIA																						
AUSTRALIA/N.Z.	0	1.5	+	1.5	0	2.8	0	2.8	40.6	35.6	+	76.2	2.6	29.4	0.5	31.5	43.2	69.3	0.5	0	+12.2	124.2
EGYPT	15.4	0.2	+	15.6	11.0	0.3	0.6	10.7	19.4	11.5	0	30.9	75.4	0.6	24.2	51.8	121.2	12.6	24.8	0	-7.6	101.4
IRAN	0	0.1	0	0.1	0	1.4	0	1.4	20.5	0.5	0	21.0	55.1	32.7	0	87.8	75.6	34.7	0	0	0	110.3
IRAQ	6.4	0.8	0	7.2	12.1	1.9	0	14.0	0	1.3	0	1.3	0	0.4	0	0.4	18.5	4.4	0	+0.3	0	23.2
ISRAEL	0	0.6	+	0.6	0	0.1	0.1	0	26.5	16.5	11.1	31.9	17.6	17.0	10.0	24.6	44.1	34.2	21.2	+0.5	+6.1	63.7
KENYA	0	0	0	0	0	2.4	0	2.4	11.0	+	0	11.0	2.4	12.6	0	15.0	13.4	15.0	0	0	0	28.4
NIGERIA	0	0.1	0	0.1	0	3.0	0.1	2.9	9.9	1.1	0	11.0	6.8	2.5	0	9.3	16.7	6.7	0.1	0	0	23.3
SOUTH AFRICA	0	0.2	+	0.2	0	1.2	0	1.2	122.6	15.1	9.4	128.3	77.6	65.4	0.7	142.3	200.2	81.9	10.1	+0.2	-1.6	270.6
TANZANIA	0	0	0	0	0	0	0	0	6.6	1.1	0	7.7	0	0	0	0	6.6	1.1	0	0	0	7.7
TOTAL M.E., A. & O.	21.8	3.5	+	25.3	23.1	13.1	0.8	35.4	257.1	82.7	20.5	319.3	237.5	160.6	35.4	362.7	539.5	259.9	56.7	+1.0	+9.1	752.8
TOTAL ALL COUNTRIES	2062.1	495.0	416.2	2140.9	4299.6	1054.4	946.5	4407.5	14170.2	2729.5	3164.2	13735.5	17339.6	4025.8	4593.7	16771.7	37871.5	8304.7	9120.6	+3.2	-127.3	36931.5

Explanation of this table can be found below.
NA Not Available.
+ Less than 100 thousand pounds.

NET AVAILABLE SUPPLY

The 1988 by-country production, import, export and net available or retained supply of four categories of manufactured fiber are presented in millions of pounds in Table 12. The data in Table 12 exclude acetate cigarette tow and include imports and exports of tire cord and tire cord fabric.

"Net Available Supply" is defined as production plus imports less exports plus the balance of trade in spun yarn. Sometimes this is called **"apparent consumption"**. **"Yarn"** is defined to include tire cord and tire cord fabric, filament yarn and monofilaments. **"Staple"** is defined to include tow, fiberfill, tops and advanced waste. Unprocessed waste is not included.

Except for spun yarns, the imports and exports of manufactured and semimanufactured products (e.g., fabric, dresses, hosiery, etc.) are not included in the manufactured fiber data.

The spun yarn data are shown under the **"Total Manufactured Fiber"** columns in Table 12. Space does not permit the presentation of import and export data separately. These data may include some quantities of blending fibers other than manufactured fiber.

A net import quantity is shown in the **"spun"** column as (+); in other words, an addition to a country's net available supply, while conversally a net export is shown as (-). For example, the 1988 artificial (cellulosic) spun net yarn figure for Japan is shown as -1.8, which consists of imports of 0.9 (+0.9) and exports of 2.7 (-2.7).

TABLE 13:
1988 MILL CONSUMPTION OF MANUFACTURED FIBER, COTTON & WOOL IN SELECTED COUNTRIES (EXCLUDING OLEFIN & GLASS FIBER)
MILLION POUNDS

COUNTRY	MANUFACTURED FIBER[a]	COTTON[b]	WOOL[c]	TOTAL
WESTERN EUROPE				
AUSTRIA	155.5	48.5	9.9	213.9
BELGIUM/NETHERLANDS	611.6	113.3	81.8	806.7
FINLAND	121.0	12.5	2.4	135.9
FRANCE	755.6	311.0	72.1	1138.7
GERMANY, FED. REP. OF	1126.2	436.8	114.7	1677.7
GREECE	105.0	352.8	33.6	491.4
IRELAND	30.0	50.4	14.9	95.3
ITALY/MALTA	935.0	686.4	308.4	1929.8
NORWAY	18.5	7.2	3.9	29.6
PORTUGAL	229.5	397.0	20.5	647.0
SPAIN	607.6	297.1	37.3	942.0
SWEDEN	79.0	10.1	1.1	90.2
SWITZERLAND	49.8	145.4	16.3	211.5
TURKEY	634.1	1234.6	104.7	1973.4
UNITED KINGDOM	977.5	89.3	191.8	1258.6
TOTAL WESTERN EUROPE	**6435.9**	**4192.4**	**1013.4**	**11641.7**
EASTERN EUROPE				
ALBANIA	4.2	16.8	d	21.0
BULGARIA	279.4	117.6	36.2	433.2
CZECHOSLOVAKIA	424.4	276.0	51.3	751.7
GERMANY, DEM. REP.	713.6	230.4	42.6	986.6
HUNGARY	88.7	151.7	13.4	253.8
POLAND	507.9	371.0	57.1	936.0
ROMANIA	564.6	170.4	51.5	786.5
U.S.S.R.	3370.0	4464.0	701.1	8535.1
YUGOSLAVIA	330.7	242.9	34.5	608.1
TOTAL EASTERN EUROPE	**6283.5**	**6040.8**	**987.7**	**13312.0**
TOTAL EUROPE	**12719.4**	**10233.2**	**2001.1**	**24953.7**
U.S.A.	**7172.3**	**3624.0**	**127.7**	**10924.0**
CANADA	**544.8**	**91.7**	**14.0**	**650.5**
OTHER AMERICAS				
ARGENTINA	117.8	220.3	52.9	391.0
BOLIVIA	1.9	24.0	10.9	36.8
BRAZIL	601.1	1861.0	12.5	2474.6
CHILE	66.1	33.6	16.2	115.9
COLOMBIA	124.8	180.0	7.7	312.5
COSTA RICA	8.4	5.8	d	14.2
CUBA	21.1	100.8	d	121.9
ECUADOR	30.6	33.6	d	64.2
MEXICO	748.8	373.4	d	1122.2
PERU	105.1	151.7	d	256.8
URUGUAY	16.4	4.8	16.6	37.8
VENEZUELA	92.1	101.8	1.8	195.7
TOTAL OTHER AMERICAS	**1934.2**	**3090.8**	**118.6**	**5143.6**

TABLE 13:
1988 MILL CONSUMPTION OF MANUFACTURED FIBER, COTTON & WOOL IN SELECTED COUNTRIES *(CONTINUED)*
MILLION POUNDS

COUNTRY	MANUFACTURED FIBER[a]	COTTON[b]	WOOL[c]	TOTAL
JAPAN	**2727.5**	**1694.4**	**277.6**	**4699.5**
CHINA, PRC	**3933.4**	**9504.0**	**659.9**	**14097.3**
OTHER ASIA				
BANGLADESH	9.6	125.3	d	134.9
HONG KONG	79.1	516.0	12.7	607.8
INDIA	1120.2	3901.0	78.5	5099.7
INDONESIA	686.6	465.1	d	1151.7
KOREA, REP. OF	2296.3	1014.7	119.6	3430.6
MALAYSIA	135.0	83.5	1.8	220.3
PAKISTAN	210.1	1855.2	56.3	2121.6
PHILIPPINES	122.7	148.3	d	271.0
SRI LANKA	7.1	21.1	d	28.2
TAIWAN	2132.3	864.0	45.0	3041.3
THAILAND	348.1	584.2	d	932.3
TOTAL OTHER ASIA	**7147.1**	**9578.4**	**313.9**	**17039.4**
MIDDLE EAST, AFRICA & OCEANIA				
AUSTRALIA/NEW ZEALAND	124.2	55.2	86.6	266.0
EGYPT	101.4	626.4	d	727.8
IRAN	110.3	242.4	d	352.7
IRAQ	23.2	96.0	d	119.2
ISRAEL	63.7	35.0	d	98.7
KENYA	28.4	21.6	2.0	52.0
NIGERIA	23.3	132.5	0	155.8
SOUTH AFRICA	270.6	176.2	21.8	468.6
TANZANIA	7.7	30.2	0	37.9
TOTAL M.E., A. & O.	**752.8**	**1415.5**	**110.4**	**2278.7**
TOTAL ALL COUNTRIES	**36931.5**	**39232.0**	**3623.2**	**79786.7**

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a. Manufactured fiber data are from Table 13, pages 14 & 15, this issue. The data show the manufactured net available supply, which approximates mill consumptions.

b. **Source:** ***International Cotton Advisory Committee.*** Cotton refers to ginned raw cotton. It does not refer to waste or cotton fibers subjected to any other process. Data are for cotton year ending July 31, 1988.

c. **Source:** ***Commonwealth Secretariat.*** Wool refers to virgin wool, clean basis, at the spinning stage.

d. Represents minimal quantity, with exact amount not reported.

TABLE 14:
SELECTED U.S. ANNUAL FIBER DATA

MILLION POUNDS

ITEM	1983	1984	1985	1986	1987	1988	1989
MANUFACTURED FIBER TOTAL SHIPMENTS [a, b]							
ARTIFICIAL (CELLULOSIC)							
YARN	225.8	198.3	210.1	212.3	191.7	216.7	219.0
RAYON STAPLE [g]	NA	NA	NA	NA	NA	NA	NA
TOTAL ARTIFICIAL (CELLULOSIC)	**225.8**	**198.3**	**210.1**	**212.3**	**191.7**	**216.7**	**219.0**
SYNTHETIC (NONCELLULOSIC)							
YARN+MONOFILAMENTS							
NYLON - INDUSTRIAL [c]	318.1	375.1	345.1	333.4	373.4	375.2	364.6
- CARPET	762.6	794.9	835.4	898.5	941.6	976.2	967.7
- TEXTILE [d]	416.9	387.4	355.3	360.5	378.8	387.0	400.4
POLYESTER - INDUSTRIAL [c]	307.8	313.1	292.1	313.9	338.8	360.2	365.0
- TEXTILE [d]	1053.1	885.0	1020.4	855.8	841.5	871.9	804.0
OLEFIN [e]	714.2	742.1	951.1	1059.7	1143.8	1219.6	1251.0
TOTAL YARN	**3572.7**	**3497.6**	**3799.4**	**3821.8**	**4017.9**	**4190.1**	**4152.7**
STAPLE+TOW+FIBERFILL							
NYLON	911.2	831.3	843.6	908.2	985.5	963.9	978.5
ACRYLIC+MODACRYLIC	654.7	666.2	643.8	614.1	594.4	590.2	537.2
POLYESTER	2197.8	2192.4	2038.6	2123.4	2369.2	2448.9	2353.5
OLEFIN [f]	189.7	246.7	288.2	331.5	363.9	363.8	375.4
TOTAL STAPLE	**3953.4**	**3936.6**	**3814.2**	**3977.2**	**4313.0**	**4366.8**	**4244.6**
TOTAL SYNTHETIC (NONCELL.)	**7526.1**	**7434.2**	**7613.6**	**7799.0**	**8330.9**	**8556.9**	**8397.3**
TOTAL MANUFACTURED FIBER	**7751.9**	**7632.5**	**7823.7**	**8011.3**	**8522.6**	**8773.6**	**8616.3**
MANUFACTURED FIBER YEAR END STOCK							
ARTIFICIAL (CELLULOSIC)							
YARN	12.5	12.4	12.3	14.8	14.2	11.4	9.9
RAYON STAPLE [g]	NA	NA	NA	NA	NA	NA	NA
TOTAL ARTIFICIAL (CELLULOSIC)	**12.5**	**12.4**	**12.3**	**14.8**	**14.2**	**11.4**	**9.9**
SYNTHETIC (NONCELLULOSIC)							
YARN+MONOFILAMENTS							
NYLON - INDUSTRIAL [c]	23.8	27.4	25.5	30.8	20.9	22.3	31.1
- CARPET	54.0	63.0	46.4	54.7	65.4	57.3	63.8
- TEXTILE [d]	43.0	50.3	47.8	47.3	49.9	45.7	56.8
POLYESTER - INDUSTRIAL [c]	18.7	22.1	24.2	29.4	27.8	35.0	36.8
- TEXTILE [d]	78.9	77.4	83.7	81.5	81.5	70.9	108.9
OLEFIN [e]	56.5	61.5	64.9	62.9	52.9	57.4	66.9
TOTAL YARN	**274.9**	**301.7**	**292.5**	**306.6**	**298.4**	**288.6**	**364.3**
STAPLE+TOW+FIBERFILL							
NYLON	75.1	78.6	62.7	62.8	69.7	47.5	49.8
ACRYLIC+MODACRYLIC	72.8	77.4	64.4	66.2	63.3	61.2	66.5
POLYESTER	174.1	173.5	155.0	163.9	156.5	159.4	189.9
OLEFIN [f]	20.0	23.2	29.7	33.5	30.1	30.3	34.6
TOTAL STAPLE	**342.0**	**352.7**	**311.8**	**326.4**	**319.6**	**298.4**	**340.8**
TOTAL SYNTHETIC (NONCELL.)	**616.9**	**654.4**	**604.3**	**633.0**	**618.0**	**587.0**	**705.1**
TOTAL MANUFACTURED FIBER	**629.4**	**666.8**	**616.6**	**647.8**	**632.2**	**598.4**	**715.0**

NA No Longer Available.

a. The annual production of each fiber may be calculated as total shipments plus a stock increase or less a stock decrease from the previous year.

b. Producers' total domestic shipments plus export shipments.

c. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

d. Includes low denier industrial yarn.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes Vinyon until 1987.

g. Data for rayon staple no longer available.

TABLE 15:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

ITEM	1989												YEAR TO DATE[a]	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	17.3	17.1	18.4	21.5	18.3	18.4	18.9	17.8	17.3	19.9	14.8	19.3	219.0	216.7
RAYON STAPLE	34.5	32.1	36.5	31.4	34.8	30.9	24.8	29.4	26.7	DATA NO LONGER AVAILABLE				
TOTAL ARTIFICIAL (CELLULOSIC)	**51.8**	**49.2**	**54.9**	**52.9**	**53.1**	**49.3**	**43.7**	**47.2**	**44.0**	**19.9**	**14.8**	**19.3**	**219.0**	**216.7**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	31.3	30.5	32.6	32.3	28.9	32.7	29.1	29.2	28.6	28.8	28.7	31.9	364.6	375.2
- CARPET	74.9	77.2	82.0	77.5	86.1	78.5	73.4	89.9	88.7	79.5	78.7	81.3	967.7	976.2
- TEXTILE[f]	33.9	33.2	35.0	34.6	33.8	34.2	31.8	32.3	32.7	33.1	32.9	32.9	400.4	387.0
POLYESTER - INDUSTRIAL[d]	28.6	29.7	30.9	32.2	30.4	32.8	29.8	32.5	29.2	30.3	26.4	32.2	365.0	360.2
- TEXTILE[f]	73.2	71.2	74.4	78.2	77.0	66.1	72.5	54.9	58.5	62.5	55.7	59.8	804.0	871.9
OLEFIN[e]	105.3	104.3	103.6	104.1	112.3	105.5	94.8	107.0	107.0	109.3	105.4	92.4	1251.0	1219.6
TOTAL YARN	**347.2**	**346.1**	**358.5**	**358.9**	**368.5**	**349.8**	**331.4**	**345.8**	**344.7**	**343.5**	**327.8**	**330.5**	**4152.7**	**4190.1**
STAPLE+TOW+FIBERFILL														
NYLON	82.3	78.4	88.8	76.4	81.3	78.3	74.9	90.8	85.5	85.9	81.9	74.0	978.5	963.9
ACRYLIC+MODACRYLIC	41.7	46.2	48.6	49.2	51.7	44.0	41.1	47.6	44.1	44.0	41.9	37.1	537.2	590.2
POLYESTER	205.8	192.1	212.4	214.3	208.1	193.9	182.3	198.8	182.0	200.4	182.4	181.0	2353.5	2448.9
OLEFIN	31.1	31.6	32.0	31.4	32.3	31.2	27.8	33.9	33.1	33.4	29.1	28.5	375.4	363.8
TOTAL STAPLE	**360.9**	**348.3**	**381.8**	**371.3**	**373.4**	**347.4**	**326.1**	**371.1**	**344.7**	**363.7**	**335.3**	**320.6**	**4244.6**	**4366.8**
TOTAL SYNTHETIC (NONCELLULOSIC)	**708.1**	**694.4**	**740.3**	**730.2**	**741.9**	**697.2**	**657.5**	**716.9**	**689.4**	**707.2**	**663.1**	**651.1**	**8397.3**	**8556.9**
TOTAL MANUFACTURED FIBER	**759.9**	**743.6**	**795.2**	**783.1**	**795.0**	**746.5**	**701.2**	**764.1**	**733.4**	**727.1**	**677.9**	**670.4**	**8616.3**	**8773.6**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	11.7	10.9	11.3	10.4	9.7	8.9	11.0	10.7	11.6	10.2	8.9	9.9	9.9	11.4
RAYON STAPLE	13.0	13.2	11.7	12.5	13.4	15.8	16.8	16.3	18.1	DATA NO LONGER AVAILABLE				
TOTAL ARTIFICIAL (CELLULOSIC)	**24.7**	**24.1**	**23.0**	**22.9**	**23.1**	**24.7**	**27.8**	**27.0**	**29.7**	**10.2**	**8.9**	**9.9**	**9.9**	**11.4**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.4	24.8	22.4	22.9	24.2	24.5	26.7	27.3	28.7	30.4	25.8	31.1	31.1	22.3
- CARPET	63.5	63.2	62.8	68.7	64.0	66.8	73.6	59.3	54.6	51.5	56.6	63.8	63.8	57.3
- TEXTILE[f]	47.1	48.3	46.4	47.0	47.4	49.2	52.7	54.1	56.3	55.3	53.6	56.8	56.8	45.7
POLYESTER - INDUSTRIAL[d]	35.0	31.4	30.6	31.6	30.9	31.9	33.9	32.3	33.2	33.9	35.6	36.8	36.8	35.0
- TEXTILE[f]	73.5	76.9	81.8	85.1	85.0	89.1	99.7	115.7	116.8	117.7	120.5	108.9	108.9	70.9
OLEFIN[e]	53.1	53.8	58.0	57.8	58.5	60.7	61.1	60.6	62.3	62.6	65.3	66.9	66.9	57.4
TOTAL YARN	**296.6**	**298.4**	**302.0**	**313.1**	**310.0**	**322.2**	**347.7**	**349.3**	**351.9**	**351.4**	**357.4**	**364.3**	**364.3**	**288.6**
STAPLE+TOW+FIBERFILL														
NYLON	51.8	52.9	51.0	57.5	57.5	57.0	59.1	46.9	46.8	48.8	50.5	49.8	49.8	47.5
ACRYLIC+MODACRYLIC	70.5	68.3	69.0	67.3	65.2	69.7	71.7	69.3	66.3	67.2	64.0	66.5	66.5	61.2
POLYESTER	163.5	163.8	158.5	164.4	176.2	191.0	226.5	233.6	218.9	219.7	204.4	189.9	189.9	159.4
OLEFIN	31.0	31.3	32.8	34.3	35.2	33.3	34.2	34.1	30.5	33.2	34.2	34.6	34.6	30.3
TOTAL STAPLE	**316.8**	**316.3**	**311.3**	**323.5**	**334.1**	**351.0**	**391.5**	**383.9**	**362.5**	**368.9**	**353.1**	**340.8**	**340.8**	**298.4**
TOTAL SYNTHETIC (NONCELLULOSIC)	**613.4**	**614.7**	**613.3**	**636.6**	**644.1**	**673.2**	**739.2**	**733.2**	**714.4**	**720.3**	**710.5**	**705.1**	**705.1**	**587.0**
TOTAL MANUFACTURED FIBER	**638.1**	**638.8**	**636.3**	**659.5**	**667.2**	**697.9**	**767.0**	**760.2**	**744.1**	**730.5**	**719.4**	**715.0**	**715.0**	**598.4**
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL	12.1	12.8	14.1	11.5	11.5	11.3	10.6	10.9	11.7	9.9	10.1		126.5	129.7
CARPET CLASS WOOL	0.8	1.4	1.5	1.6	1.6	1.3	1.2	1.5	1.7	1.3	1.0		14.9	14.6
TOTAL RAW WOOL	**12.9**	**14.2**	**15.6**	**13.1**	**13.1**	**12.6**	**11.8**	**12.4**	**13.4**	**11.2**	**11.1**		**141.4**	**144.3**
RAW COTTON	289.5	301.0	339.2	305.7	362.3	343.5	286.8	341.0	400.7	332.7	324.6		3627.0	3232.0

a. "Year to date" totals for stock, are the latest month's figures. **Data for Rayon staple no longer available.**

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

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- Shipments by Denier
- Indirect Exports

Quarterly
- Production
- Domestic Shipments
- Imports
- Exports
- Shipments by Denier
- Inventories
- Primary End Use
- Secondary End Use
- Waste Shipments
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MANUFACTURED FIBER HANDBOOK

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C3460-1

FIBER ORGANON

Formerly Textile Organon

Volume 61, No. 2 ☐ February 1990

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Highlights

- Trade in Apparel and Textiles by Selected Countries...see pages 23 - 27.
- 1989 Import/Export Review...begins on page 28.
- Quarterly Manufactured Fiber Data ...begins on page 40.

SHIPMENTS:

In January, total manufactured fiber shipments reached 670 million pounds, slightly below the 672 million pounds shipped in December and 8% below the 725 million pounds shipped in January 1989.

January shipments of synthetic (noncellulosic) filament yarn fell 1% to 330 million pounds and staple+tow rose 1% to 325 million pounds.

Contributing to the decrease in shipments over the previous month were nylon industrial yarn down 22% or 7 million pounds, polyester industrial yarn down 16% or 5 million pounds and nylon textile yarn down 4 million pounds or 12%.

Year-to-date domestic shipments of manufactured fiber are down 6% and exports are down 34%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1990 JAN	1989 DEC	% CHG 1/90 - 12/89	1989 JAN	% CHG 1/90 - 1/89	YEAR TO DATE 1990	YEAR TO DATE 1989	% CHG YTD 1990 - 1989
ARTIFICIAL (CELLULOSIC)								
YARN	15.1	19.3	*-21.8*	17.3	*-12.7*	15.1	17.3	*-12.7*
RAYON STAPLE	NA	NA	*NA*	NA	*NA*	NA	NA	*NA*
TOTAL ARTIFICIAL (CELL.)	**15.1**	**19.3**	***-21.8***	**17.3**	***-12.7***	**15.1**	**17.3**	***-12.7***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	24.9	31.8	*-21.7*	31.3	*-20.4*	24.9	31.3	*-20.4*
- CARPET	86.5	81.3	*+6.4*	74.9	*+15.5*	86.5	74.9	*+15.5*
- TEXTILE[a]	28.8	32.7	*-11.9*	33.9	*-15.0*	28.8	33.9	*-15.0*
POLYESTER - INDUSTRIAL	27.2	32.5	*-16.3*	28.6	*-4.9*	27.2	28.6	*-4.9*
- TEXTILE[a]	56.2	59.8	*-6.0*	73.2	*-23.2*	56.2	73.2	*-23.2*
OLEFIN	106.1	94.1	*+12.8*	105.3	*+0.8*	106.1	105.3	*+0.8*
TOTAL YARN	**329.7**	**332.2**	***-0.8***	**347.2**	***-5.0***	**329.7**	**347.2**	***-5.0***
STAPLE+TOW+FIBERFILL								
NYLON	88.9	74.0	*+20.1*	82.3	*+8.0*	88.9	82.3	*+8.0*
ACRYLIC+MODACRYLIC	39.2	37.1	*+5.7*	41.7	*-6.0*	39.2	41.7	*-6.0*
POLYESTER	166.9	181.3	*-7.9*	205.8	*-18.9*	166.9	205.8	*-18.9*
OLEFIN	30.3	28.3	*+7.1*	31.1	*-2.6*	30.3	31.1	*-2.6*
TOTAL STAPLE	**325.3**	**320.7**	***+1.4***	**360.9**	***-9.9***	**325.3**	**360.9**	***-9.9***
TOTAL SYNTHETIC (NONCELL.)	**655.0**	**652.9**	***+0.3***	**708.1**	***-7.5***	**655.0**	**708.1**	***-7.5***
TOTAL MANUFACTURED FIBER	**670.1**	**672.2**	***-0.3***	**725.4**	***-7.6***	**670.1**	**725.4**	***-7.6***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS[b]	640.2	624.3	*+2.5*	680.0	*-5.9*	640.2	680.0	*-5.9*
EXPORTS[c]	29.9	47.9	*-37.6*	45.4	*-34.1*	29.9	45.4	*-34.1*

a. Includes low denier industrial yarn.
b. Includes olefin exports.
c. Excludes olefin exports.

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Formerly ***Textile Organon***

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FIBER ECONOMICS BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
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Facsimile: (201) 228-7598

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CONTENTS

Features

Trade in Apparel and Textiles by Selected Countries 23 - 27
- Graph 1: Trade Balance of Apparel and Textiles for Selected Countries 23
- Imports, Exports & Balance of Apparel and Textiles by Selected Countries 24
- Apparel Imports by Selected Countries 24
- Percent Share of Apparel Imports for Selected Developed & Developing Countries 24
- Textile Exports by Selected Countries 25
- Percent Share of Textile Imports for Selected Developed & Developing Countries 25
- Graph 2: Per Capita Apparel Imports by Selected Developed Countries 26
- Graph 3: Share of Apparel Imports from Developing Countries 26
- Graph 4: Per Capita Textile Exports by Selected Developed Countries 27
- Graph 5: Share of Textile Imports from Developing Countries 27

1989 Import/Export Review 28 - 36
- Selected U.S. Exports by Country of Destination 28 - 29
- U.S. Imports of Manufactured Fiber 30
- U.S. Exports of Manufactured Fiber 31
- U.S. Imports of Manufactured Fiber - 1989 32
- U.S. Exports of Manufactured Fiber - 1989 33
- Selected U.S. Manufactured Fiber Imports by Country of Origin 34 - 35
- Graph 6: Imports vs. Exports of Manufactured Fiber 36
- Manufactured Fiber Quarterly Trade Balance 36

Industry Regulars

Total U.S. Manufactured Fiber Shipments 21

Monthly U.S. Manufactured Fiber Data 37 - 39
- Imports by Country of Origin 37
- Imports by Fiber 38
- Exports by Fiber 39

Quarterly Manufactured Fiber Data 40 - 41
- Yarn+Monofilaments 40
- Staple+Tow 41

Selected U.S. Monthly Fiber Data 42

TRADE IN APPAREL AND TEXTILES BY SELECTED COUNTRIES

Last September a GATT Secretariat Report updated textile and apparel trade trends for selected developed and developing regions. Seen below are some of the highlights concerning the U.S. compared to the E.E.C. and Japan.

- In 1988 the U.S. had by far the highest textile/apparel trade deficit.
- 1988 per capita apparel imports in dollars into the U.S. were over 70% higher than the E.E.C. and Japan.
- 88% of the U.S. apparel imports were sourced in developing countries, vs. 71% in 1973.
- Per capita textile product exports in dollars from the U.S. were significantly lower than from the E.E.C. and Japan.

GRAPH 1:
1973 VS. 1988 TRADE BALANCE OF APPAREL AND TEXTILES FOR SELECTED COUNTRIES

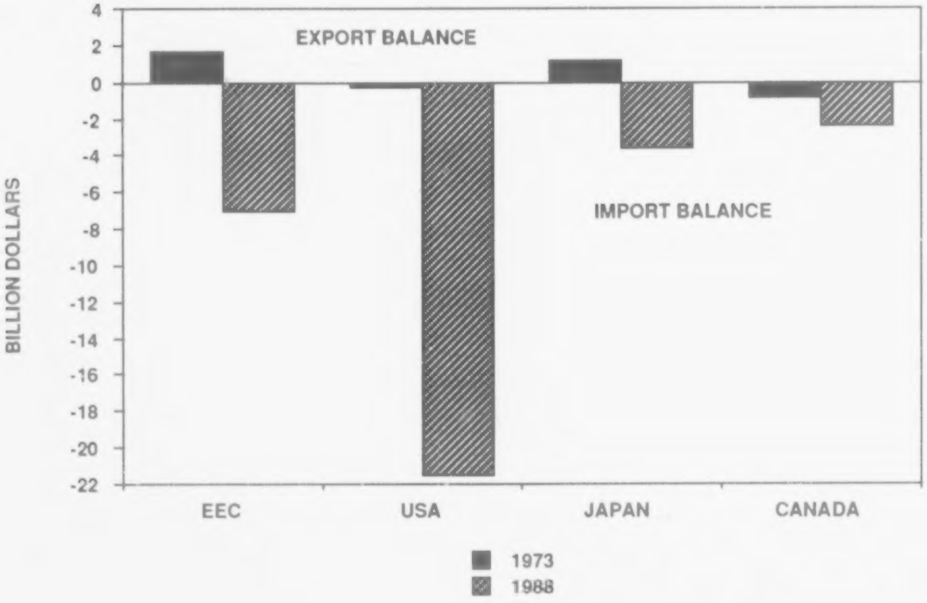


TABLE 2:
1973 VS. 1988 IMPORTS, EXPORTS & BALANCE OF APPAREL AND TEXTILES BY SELECTED COUNTRIES
BILLION DOLLARS

	1973			1988		
	IMPORTS	EXPORTS	TRADE BALANCE	IMPORTS	EXPORTS	TRADE BALANCE
EEC	4.448	6.152	1.704	28.360	21.400	(6.960)
USA	3.277	1.482	(1.795)	26.103	4.665	(21.438)
JAPAN	1.593	2.738	1.145	9.346	5.803	(3.543)
CANADA	1.083	.238	(.845)	3.178	.790	(2.388)

SOURCE: *General Agreement on Trade and Tariffs,* September 1989.

TABLE 3:
1973 VS. 1988 APPAREL IMPORTS BY SELECTED COUNTRIES

	BILLION DOLLARS		POPULATION [a]		PER CAPITA IMPORTS [b]	
	1973	1988	1973	1988	1973	1988
EEC	2.021	17.360	331.9	357.1	6.09	48.61
USA	1.971	20.408	211.9	246.3	9.30	82.86
JAPAN	.541	5.815	108.7	122.6	4.98	47.43
CANADA	.313	1.780	22.7	26.0	13.79	68.46

SOURCE: *General Agreement on Tariffs and Trade*, September 1989.

a. In millions. Population data for EEC are taken from ***CIRFS*** and for Other Countries from ***Monthly Bulletin of Statistics***, United Nations.

b. In dollars, equivalent to wholesale dollars.

TABLE 4:
1973 VS. 1988 PERCENT SHARE OF APPAREL IMPORTS FOR SELECTED DEVELOPED & DEVELOPING COUNTRIES

	DEVELOPED COUNTRIES		DEVELOPING COUNTRIES	
	1973	1988	1973	1988
EEC	28	14	72	86
USA	29	12	71	88
JAPAN	18	16	82	84

SOURCE: *General Agreement on Trade and Tariffs,* September 1989.

TABLE 5:
1973 VS. 1988 TEXTILE EXPORTS BY SELECTED COUNTRIES

	BILLION DOLLARS		POPULATION[a]		PER CAPITA EXPORTS[b]	
	1973	1988	1973	1988	1973	1988
EEC	4.598	12.300	331.9	357.1	13.85	34.44
USA	1.220	3.357	211.9	246.3	5.76	13.63
JAPAN	2.392	5.224	108.7	122.6	22.00	42.61
CANADA	.148	.620	22.7	26.0	6.52	23.85

SOURCE: ***General Agreement on Tariffs and Trade***, September 1989.

a. In millions. Population data for EEC are taken from ***CIRFS*** and for Other Countries from ***Monthly Bulletin of Statistics***, United Nations.

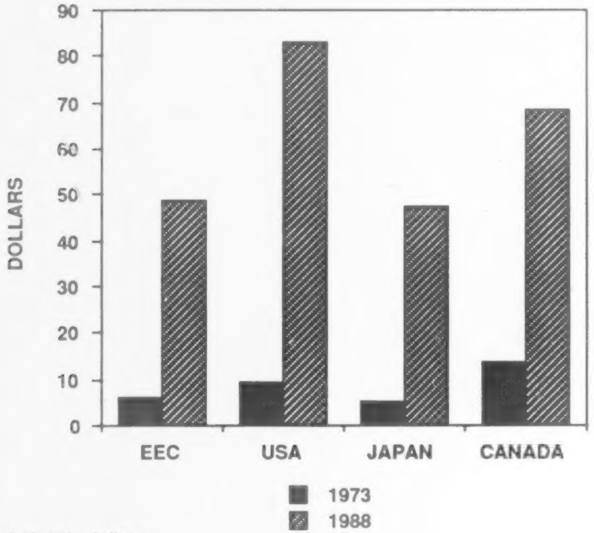
b. In dollars, equivalent to wholesale dollars.

TABLE 6:
1973 VS. 1988 PERCENT SHARE OF TEXTILE IMPORTS FOR SELECTED DEVELOPED & DEVELOPING COUNTRIES

	DEVELOPED COUNTRIES		DEVELOPING COUNTRIES	
	1973	1988	1973	1988
EEC	51	45	49	55
USA	71	46	29	54
JAPAN	46	35	54	65

SOURCE: ***General Agreement on Trade and Tariffs,*** September 1989.

GRAPH 2:
1973 VS. 1988 PER CAPITA APPAREL IMPORTS BY SELECTED DEVELOPED COUNTRIES[a]



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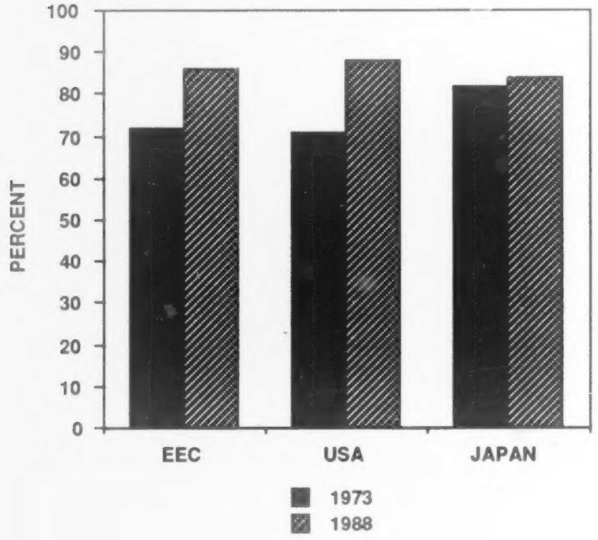
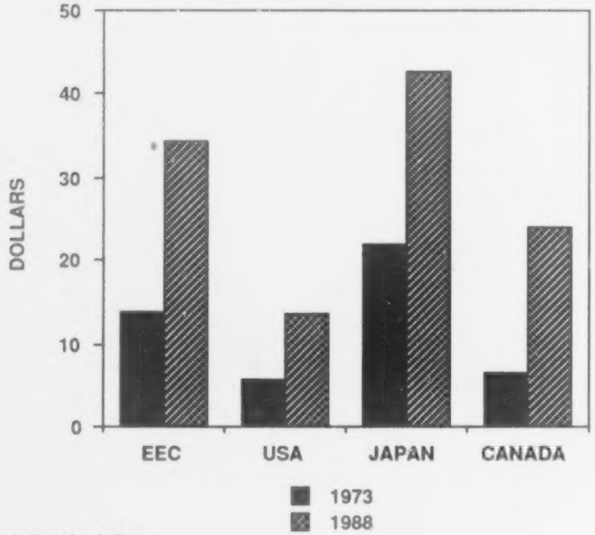
a. In dollars, equivalent to wholesale dollars.

GRAPH 3:
1973 VS. 1988 SHARE OF APPAREL IMPORTS FROM DEVELOPING COUNTRIES



GRAPH 4:
1973 VS. 1988 PER CAPITA TEXTILE EXPORTS BY SELECTED DEVELOPED COUNTRIES[a]



a. In dollars, equivalent to wholesale dollars.

GRAPH 5:
1973 VS. 1988 SHARE OF TEXTILE IMPORTS FROM DEVELOPING COUNTRIES

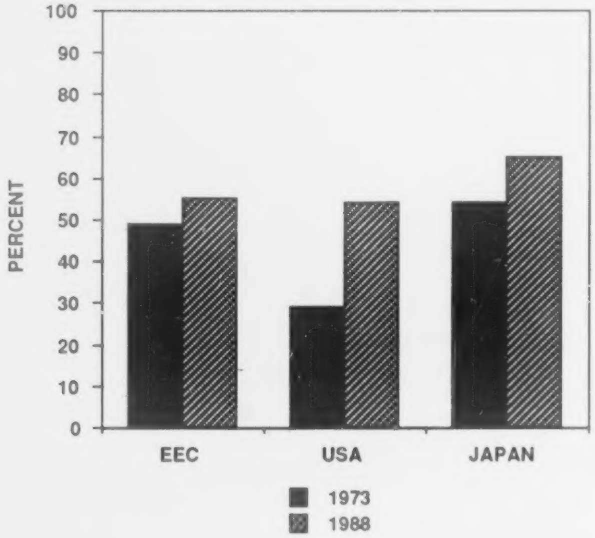


TABLE 7:
SELECTED U.S. EXPORTS BY COUNTRY OF DESTINATION

COUNTRY	A. ARTIFICIAL (CELL.) YARN MONOFIL & STRIPS				B. SYNTHETIC (NONCELL.) TEXTILE YARN				C. SYNTHETIC (NONCELL.) IND. YARN, MONOFIL & STRIPS				D. ARTIFICIAL (CELL.) STAPLE+TOW				E. SYNTHETIC (NONCELL.) STAPLE+TOW			
	THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS	
	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
AUSTRIA	0	0	0	0	1	0	3	0	111	56	308	130	0	0	0	0	105	5	105	2
BELGIUM/LUXEMBOURG	1638	10	3301	100	12286	9164	38652	14729	29558	35509	52170	79476	2028	1503	1518	1496	9656	12913	36417	40082
DENMARK	0	0	0	0	911	375	1106	550	176	3547	215	3985	0	1	0	2	1920	112	1951	312
FINLAND	0	0	0	0	156	308	493	587	1283	651	1395	619	2	0	2	0	405	319	494	210
FRANCE	47	13	297	18	2912	784	11099	3911	1178	1973	2596	5104	149	40	197	10	3100	1150	3243	1146
GERMANY, FED. REP. OF	174	362	350	982	1782	4220	8383	11944	2796	6335	5685	9899	121	76	423	41	5531	2700	9677	3689
GREECE	0	0	0	0	110	19	208	38	54	53	318	262	23	0	35	0	51	49	46	122
ICELAND	0	0	0	0	0	0	0	0	0	119	0	144	0	0	0	0	229	17	252	23
IRELAND	0	86	0	126	1635	1475	2286	1877	739	2969	1065	4434	235	795	594	878	1921	365	2097	353
ITALY	210	9	360	45	599	972	1444	3600	1489	988	2577	1865	27	149	36	23	9617	1388	7335	1065
NETHERLANDS	3	594	72	310	1012	826	1503	1202	1040	4717	2189	6986	6	14	6	4	8645	6523	6942	5077
NORWAY	0	0	0	0	51	0	76	0	39	70	56	96	42	0	48	0	476	17	569	15
PORTUGAL	0	+	0	5	636	219	578	267	2	734	8	806	0	0	0	0	32	45	15	35
SPAIN	1	0	5	0	6587	4813	8272	6477	397	3598	654	5351	10	0	13	0	5201	2072	3977	1827
SWEDEN	30	0	154	0	194	109	263	316	1629	1682	2176	2342	11	0	13	0	2654	1219	2776	874
SWITZERLAND	0	0	0	0	16	10	224	76	54	356	257	602	13	0	22	0	2658	254	1806	330
TURKEY	0	0	0	0	5730	2773	8027	2920	31732	32106	43200	39902	0	14	0	17	8266	222	4926	138
UNITED KINGDOM	71	38	127	118	8575	6279	15984	10952	7935	10006	12668	17139	268	465	273	456	6585	5125	12249	9650
OTHER	0	0	0	0	5	0	22	0	7	+	18	4	0	0	0	0	0	0	0	0
TOTAL WESTERN EUROPE	**2174**	**1112**	**4666**	**1704**	**43198**	**32346**	**98623**	**59446**	**80219**	**105469**	**127555**	**179146**	**2935**	**3057**	**3180**	**2927**	**67052**	**34495**	**94877**	**64950**
CZECHOSLOVAKIA	0	0	0	0	0	0	0	0	1592	226	1806	1425	0	0	0	0	675	1649	576	1725
GERMANY, DEM. REP.	0	0	0	0	1	168	16	344	0	0	0	0	0	0	0	0	5	0	11	0
HUNGARY	516	0	831	0	+	5	2	68	0	21	0	16	0	0	0	0	0	1049	0	809
POLAND	0	1009	0	865	459	106	708	70	14	220	90	495	0	0	0	0	14639	6406	9704	6422
U.S.S.R.	0	84	0	211	0	0	0	0	96	821	209	2535	0	0	0	0	0	133	0	304
YUGOSLAVIA	0	0	0	0	0	18	0	38	0	354	0	432	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	8	48	123	405	0	0	0	0	0	0	0	0
TOTAL EASTERN EUROPE	**516**	**1093**	**831**	**1076**	**460**	**297**	**726**	**520**	**1710**	**1690**	**2228**	**5308**	**0**	**0**	**0**	**0**	**15319**	**9237**	**10291**	**9260**
CANADA	**1925**	**319**	**2271**	**817**	**36708**	**34940**	**60938**	**67967**	**12470**	**15947**	**27121**	**42323**	**663**	**1616**	**579**	**973**	**75933**	**61113**	**56955**	**52609**
ARGENTINA	0	325	0	43	83	186	191	271	76	248	234	854	0	5	0	4	408	534	604	708
BOLIVIA	0	0	0	0	69	36	120	44	15	10	45	49	0	0	0	0	34	38	117	76
BRAZIL	45	55	81	111	1273	48	3143	231	1797	2796	3679	6596	3	30	3	47	1038	1571	3486	2054
CHILE	11	3	27	6	86	521	307	1024	132	197	385	747	131	76	129	86	15398	10036	10665	8668
COLOMBIA	0	46	0	62	141	171	410	898	2667	1107	9623	9601	1773	3613	1201	4037	4452	5606	3596	5126
COSTA RICA	0	0	0	0	1052	759	1314	968	197	902	261	1221	7	0	7	0	4410	7521	2929	5900
DOMINICAN REPUBLIC	40	2	49	2	1412	678	1833	923	95	1039	172	1704	16	17	15	14	284	607	303	476
ECUADOR	0	5	0	17	717	161	638	166	33	725	192	1041	115	134	67	122	8494	5987	5165	5137
EL SALVADOR	0	0	0	0	120	195	139	177	331	272	590	954	1138	162	785	171	7200	10899	6603	8880
GUATEMALA	0	0	0	0	1370	1100	1185	758	5	426	32	982	119	0	110	0	7509	7596	5367	5635
HAITI	0	0	0	0	232	112	319	119	5	76	50	109	3	0	3	0	1	53	3	64
HONDURAS	2	0	5	0	279	165	438	437	11	115	37	526	0	0	0	0	1792	2566	1137	3556
JAMAICA	0	0	0	0	516	10	716	19	78	967	82	950	0	0	0	0	49	314	77	217
LEEWARD & WINDWARD ISL.	0	0	0	0	2	0	7	0	0	0	0	0	0	0	0	0	8	0	9	0
MEXICO	227	325	324	1034	3106	3299	5949	6540	4332	5659	9249	14366	13119	7510	9760	6500	19526	37110	24262	40176
NICARAGUA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PANAMA	14	0	16	0	143	8	167	31	59	87	67	104	0	1	0	4	16	12	92	42
PARAGUAY	0	0	0	0	0	0	0	0	25	0	126	0	0	0	0	0	0	0	0	0
PERU	0	0	0	0	80	1960	162	2853	156	173	280	247	214	87	125	113	7	5	9	12
TRINIDAD	0	0	0	0	57	65	149	112	4	42	26	134	0	0	0	0	6	36	17	58
URUGUAY	0	0	0	0	54	4	36	13	1	78	5	89	0	0	0	0	522	431	404	312
VENEZUELA	70	3	90	7	1808	221	4400	277	826	412	2697	1387	2433	947	2327	952	2707	418	3078	375
OTHER	19	1	20	2	183	13	1046	86	6	194	22	701	2	0	6	0	67	70	146	125
TOTAL OTHER AMERICAS	**428**	**765**	**612**	**1284**	**12783**	**9712**	**22669**	**15947**	**10851**	**15525**	**27854**	**42362**	**19073**	**12582**	**14538**	**12050**	**73928**	**91410**	**68069**	**87597**

TABLE 7:
SELECTED U.S. EXPORTS BY COUNTRY OF DESTINATION *(CONTINUED)*

COUNTRY	A. ARTIFICIAL (CELL.) YARN MONOFIL & STRIPS				B. SYNTHETIC (NONCELL.) TEXTILE YARN				C. SYNTHETIC (NONCELL.) IND. YARN, MONOFIL & STRIPS				D. ARTIFICIAL (CELL.) STAPLE+TOW				E. SYNTHETIC (NONCELL.) STAPLE+TOW			
	THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS		THOUS POUNDS		THOUS DOLLARS	
	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
BANGLADESH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HONG KONG	5	+	80	10	373	139	603	220	501	1382	2402	4296	483	440	864	1135	11170	6150	7750	7179
INDIA	85	0	54	0	182	8	460	48	3171	2932	4724	3826	278	0	175	0	1320	1435	895	3299
INDONESIA	0	0	0	0	79	175	172	249	7809	18371	12216	27491	45	+	56	3	519	1268	452	816
KOREA, REP. OF	2000	42	3465	75	1462	400	3379	1101	2151	1844	3383	4610	288	28	356	24	13731	21999	11562	17480
MALAYSIA	13	0	20	0	1	85	4	212	10	27	52	216	33	88	57	71	278	72	231	108
PAKISTAN	0	0	0	0	370	86	657	65	67	523	75	575	0	0	0	0	587	637	390	593
PHILIPPINES	23	3	17	6	334	694	884	946	777	652	6331	5219	7	30	8	45	5290	6395	5421	8513
SINGAPORE	0	+	0	2	2	10	12	35	959	532	1358	966	3	0	2	0	129	15	272	49
TAIWAN	999	1	1569	3	596	136	1168	316	4679	5370	6212	6306	354	37	364	66	23674	27324	18972	19843
THAILAND	35	0	62	0	105	188	211	350	344	742	750	811	0	36	0	30	3141	3565	1901	2037
TOTAL OTHER ASIA	**3160**	**46**	**5267**	**96**	**3504**	**1921**	**7550**	**3542**	**20468**	**32375**	**37503**	**54316**	**1491**	**659**	**1882**	**1374**	**59839**	**68860**	**47846**	**59917**
CHINA, PRC	**3460**	**778**	**4751**	**927**	**6586**	**9002**	**11617**	**6658**	**2132**	**2557**	**3166**	**3534**	**44**	**1757**	**71**	**1195**	**84557**	**34497**	**56198**	**20450**
JAPAN	**78**	**0**	**103**	**0**	**10464**	**6545**	**20701**	**10640**	**17964**	**20101**	**24783**	**36794**	**219**	**168**	**337**	**64**	**7011**	**8054**	**15505**	**21395**
ALGERIA	0	0	0	0	82	0	115	0	5	0	10	0	13	0	12	0	0	0	0	0
AUSTRALIA	745	11	1303	34	14406	13721	26103	31112	2009	11831	4125	22176	79	181	103	305	8839	2423	14590	4333
CAMEROON	0	0	0	0	118	12	113	45	0	0	0	0	0	0	0	0	0	75	0	95
EGYPT	0	0	0	0	315	2067	376	3100	150	227	125	316	0	0	0	0	931	4770	1219	3547
IRAQ	0	0	0	0	831	325	985	365	0	0	0	0	0	0	0	0	0	0	0	0
ISRAEL	55	32	63	34	1455	1400	1833	1588	6440	5900	8804	7247	5	38	9	69	885	721	733	1144
JORDAN	0	0	0	0	55	34	67	82	0	29	0	33	0	0	0	0	0	31	0	67
KENYA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208	0	109
LEBANON	0	0	0	0	230	36	334	63	157	37	230	86	0	0	0	0	0	14	0	15
MOROCCO	0	0	0	0	2030	1248	1292	1192	16	2279	21	2085	0	0	0	0	716	402	548	329
MOZAMBIQUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW ZEALAND	44	4	236	7	1145	1217	2522	3008	175	1441	652	3052	10	33	13	25	318	251	633	314
NIGERIA	0	0	0	0	251	310	271	246	76	0	133	0	0	0	0	0	308	7	8	6
QATAR	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0
SAUDI ARABIA	0	21	0	32	2113	1572	3065	2846	54	386	100	497	14	0	11	0	543	589	762	652
SOUTH AFRICA	72	1	127	2	1055	436	2180	799	182	1062	794	1623	9	0	11	0	2918	4523	2262	3238
SUDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SYRIA	0	0	0	0	3019	1000	3137	740	159	158	261	218	0	0	0	0	0	31	0	22
TANZANIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUNISIA	0	0	0	0	404	152	382	135	1	14	8	67	0	0	0	0	0	43	0	36
UNITED ARAB EMIRATES	0	0	0	0	14	45	10	38	0	2	2	10	0	0	0	0	3	75	12	104
ZAMBIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ZIMBABWE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	87	0	63	612	277	1168	359	1	81	5	235	0	0	0	0	0	716	3	614
TOTAL M.E., A., & O.	**916**	**156**	**1729**	**172**	**28135**	**23852**	**43953**	**45718**	**9426**	**23447**	**15272**	**37645**	**130**	**252**	**159**	**399**	**15461**	**14879**	**20930**	**14625**
GRAND TOTAL	**12657**	**4269**	**20230**	**6076**	**141838**	**118615**	**266777**	**210438**	**155240**	**217111**	**265482**	**401428**	**24555**	**20091**	**20746**	**18982**	**399100**	**322545**	**370671**	**330803**

SOURCE: U.S. Census Bureau Report EM546.

+ Less than 1 thousand pounds.

For 1988, the commodity numbers are:

A. 309.0110, .2210, 310.0006 & .0026.
B. 310.0008, .0009, .0010, .0014, .0029, .0034, .0040 & .0044
C. 309.0120, .0140, .0170, .2220, .2270, 310.0027 & .0032
D. 309.4219 & .4222.
E. 309.3220, .3240, .3250, .3255, .4240, .4242, .4245, .4246 & .4247.

For 1989, the Harmonized Tariff Schedule numbers are:

A. 5403.10.00.00, 5403.10.30.20, 5403.10.30.40, 5403.10.60.00, 5403.20.00.00, 5403.20.30.00, 5403.20.60.00, 5403.30.10.00 5403.39.00.40, 5403.41.00.00 -5403.49.00.00, 5405.00.30.00 & 5405.00.60.00
B. 5402.31.00.00, 5402.31.30.00, 5402.31.60.00, 5402.32.00.00, 5402.32.20.00, 5402.32.60.00, 5402.33.00.00, 5402.33.30.00, 5402.33.60.00, 5402.42.00.00, 5402.39.00.00, 5402.39.30.00, 5402.39.30.10, 5402.39.30.90, 5402.39.60.00, 5402.39.60.10 & 5402.39.60.90.
C. 5402.10.00.00, 5402.10.30.20, 5402.10.30.40, 5402.10.60.00, 5402.41.00.20, 5402.41.00.30, 5402.41.00.40, 5402.41.00.60, 5402.51.00.00, 5402.61.00.00, 5404.10.20.20, 5402.20.00.00, 5402.20.30.20, 5402.20.30.40, 5402.20.60.00, 5402.43.00.20, 5402.43.00.30, 5402.43.00.40, 5402.43.00.60, 5402.52.00.00, 5402.62.00.00, 5404.10.20.40, 5402.49.00.10, 5402.49.00.30, 5402.49.00.60, 5402.49.00.80, 5402.49.40.00, 5402.59.00.00, 5402.69.00.00, 5404.10.10.00, 5404.10.20.90, & 5404.90.00.00.
D. 5504.10.00.00, 5504.90.00.00 & 5507.00.00.00.
E. 5503.10.00.00, 5503.20.00.00, 5503.30.00.00, 5503.40.00.00, 5503.90.00.00, 5501.10.00.00, 5501.20.00.00, 5501.30.00.00, 5501.90.00.00, 5506.10.00.00, 5506.20.00.00, 5506.30.00.00 & 5506.90.00.00

TABLE 8:
U.S. IMPORTS OF MANUFACTURED FIBERS

ITEM	COMMODITY NUMBER AS OF 1/1/87	THOUSAND POUNDS					THOUSAND DOLLARS				
		1984	1985	1986	1987	1988	1984	1985	1986	1987	1938
ARTIFICIAL (CELL.) FIBERS											
YARN - SINGLES											
TEXTURED	310.0106 & .0206	1571	190	518	305	1483	940	267	610	511	2278
OTHER	310.0130 & .0230[a]	8245	12951	15669	12267	15238	12924	19129	24795	19226	29005
MONOFILAMENTS	309.0310 & .0610	5	19	20	12	7	20	44	68	77	59
STRIPS, $1/LB. & UNDER	309.2000*	160	763	756	227	913	88	624	646	196	726
SUBTOTAL ABOVE		**9981**	**13923**	**16963**	**12811**	**17641**	**13972**	**20064**	**26119**	**20010**	**32068**
STAPLE	309.4320 & .4325	15388	11286	16453	12931	19037	10320	6844	12678	11128	15491
GROUPED FILAMENTS	309.3010 & .3310	1605	1022	975	893	1364	2619	1471	1305	1600	2105
SUBTOTAL ABOVE		**16993**	**12308**	**17428**	**13824**	**20401**	**12939**	**8315**	**13983**	**12728**	**17596**
WASTE, ADVANCED & NOT ADVANCED	**309.6615 & .7510**	**530**	**479**	**121**	**85**	**7**	**323**	**263**	**79**	**25**	**14**
SYNTHETIC (NONCELL.) FIBERS											
YARN - SINGLES											
TEXTURED - NYLON											
LESS THAN 450 DENIER	310.0107 & .0207	17966	32352	2601	2035	2679	26141	35244	5025	4170	5266
450 DENIER AND OVER	310.0108 & .0208			33994	26755	17721			37305	29921	22961
- POLYESTER	310.0110 & .0210	10806	16642	14590	15580	15060	10513	14653	13029	15403	14704
- OTHER	310.0114 & .0214	8939	14723	20477	24088	25188	10536	15732	20187	23874	27436
OTHER - NYLON	310.0149 & .0249	30192	18350	22521	22839	17773	39222	23747	30781	36679	30432
- POLYESTER	310.0150 & .0250	15698	16728	22465	19425	21596	21121	20624	28831	25656	33168
- OTHER	310.0170 & .0270[b]	2468	2520	5130	6777	8204	4139	4203	7837	8804	15235
MONOFILAMENTS	309.0200 & .0330[c]	2857	2059	2722	3804	4801	8817	5537	8197	12236	17498
STRIPS, OVER $1/LB	309.2100 & .2500*	1066	1187	1557	2627	3256	5844	5886	6487	8601	11676
SUBTOTAL ABOVE		**89992**	**104561**	**126057**	**123930**	**116278**	**126333**	**125626**	**157679**	**165344**	**178376**
STAPLE - NYLON	309.4331 & .4351	38281	38544	51959	38955	21944	36579	34292	26229	42829	27622
- POLYESTER	309.4336 & .4361	22890	26800	40785	70721	73198	13272	15841	13456	40278	50045
- ACRYLIC	309.4366	13541	17611	17442	15716	15389	12568	16396	7799	13096	18946
- OLEFIN	309.4371	2213	5732	1871	514	2075	1630	3879	289	400	1072
- OTHER	309.4341 & .4390	15412	25516	14238	12992	17778	11326	21283	4258	12810	23992
GROUPED FILAMENTS											
NYLON	309.3030 & .3200	23129	29514	38536	32248	40211	33524	40769	58505	50546	64708
POLYESTER	309.3040 & .3340	7104	4980	2354	3139	4355	6569	4715	2392	3767	6242
ACRYLIC	309.3050 & .3350	6929	7518	13065	13000	19418	15116	16548	31792	31152	48130
OTHER	309.3065 & .3365	1660	3231	2540	1700	1786	2371	4313	3339	2991	2706
SUBTOTAL ABOVE		**131159**	**159446**	**182790**	**188985**	**196154**	**132955**	**153036**	**148059**	**197869**	**243463**
WASTE, NOT ADVANCED											
- NYLON	309.6625	31205	27162	22377	26926	22512	13876	10793	7755	8412	8582
- POLYESTER	309.6630	8042	7149	6304	9170	10113	1325	1143	878	1385	1961
- ACRYLIC	309.6645	39	283	328	306	167	8	48	182	70	62
- OTHER	309.6660	4074	2072	8442	4666	2577	2027	607	2142	895	502
NOILS & GARNETTED FIBERS	309.7000*	458	155	164	162	109	254	101	123	83	57
OTHER WASTE, ADVANCED	309.7525 - .7555	6729	3852	2688	5727	5026	1912	890	702	1894	1353
SUBTOTAL ABOVE		**50547**	**40673**	**40303**	**46957**	**40504**	**19402**	**13582**	**11782**	**12739**	**12517**
TOTAL MANUFACTURED ABOVE		**299202**	**331390**	**383662**	**386592**	**390985**	**305924**	**325886**	**357701**	**408715**	**484034**
OTHER MANUFACTURED FIBER TOPS, YARN & THREAD											
YARN - PLIED											
TEXTURED - ARTIFICIAL (CELL.)	310.1506	1	1	1	5	+	7	7	15	44	1
- SYNTHETIC (NONCELL.)	310.1015[d]& .1205[e]	12223	9270	10221	3999	2303	17370	9955	11926	6471	4906
OTHER - ARTIFICIAL (CELL.)	310.1030 & .1535[f]	173	390	478	553	382	723	937	1932	2622	3183
- SYNTHETIC (NONCELL.)	310.1050 & .1070[g]	2763	4032	4857	3314	3703	4447	6795	10007	7441	10053
SPUN YARN - ARTIFICIAL (CELL.)	310.4005 & .4030[h]	1724	1739	1879	1541	814	2224	2100	3105	3199	2335
- OTHER	310.4015 & .4027[i]	35583	34260	44691	37128	22206	58127	54897	75910	68943	44590
OTHER YARNS - NES, INCL. CHENILLE	310.6034 - .8000	7517	8912	16759	28029	22911	16210	15640	28555	46150	42205
HANDWORK YARNS & SEWING THREAD	310.9000 & .9310[j]	5445	9283	4593	8338	7632	18111	28952	13846	31339	29859
SLIVER, TOPS & ROVING	309.9000	4544	1941	3298	5537	3914	4792	2334	4467	7085	7530
GLASS FIBER	309.2800 & .2900[k]	23083	34690	24404	29465	26200	19203	27850	23082	29283	30562
GRAND TOTAL ABOVE		**392258**	**435908**	**494843**	**504501**	**481050**	**447138**	**475353**	**530546**	**611292**	**659258**

Source: U.S. Census Bureau Report IM146.

NES - Not elsewhere specified.

* These items are not reported by the Census as artificial (cellulosic) vs synthetic (noncellulosic).
Separation of artificial (cellulosic) and synthetic (noncellulosic) quantities are estimated, based primarily on average declared value.

[a] Also includes 310.0610.

[b] Also includes 310.0530, .0550, .0630 & .0650.

[c] Also includes 309.0340, .0365, .0500, .0630, .0640 & .0665.

[d] There may be some acetate yarn in these data, but the Census figures do not permit a segregation.

[e] Also includes 310.1210.

[f] Also includes 310.2110.

[g] Also includes 310.1510, .1514, .1550, .1555, .1570, .2030, .2050, .2130 & .2150.

[h] Also includes 310.5005 & .5030.

[i] Also includes 310.4046, .4047, .4050, .5015, .5046, .5047, .5049 & .5051.

[j] Also includes 310.9320 & .9500.

[k] Chiefly roving. Also includes 309.9800 & .9900.

TABLE 9:
U.S. EXPORTS OF MANUFACTURED FIBERS

ITEM	COMMODITY NUMBER AS OF 1/1/87	THOUSAND POUNDS					THOUSAND DOLLARS				
		1984	1985	1986	1987	1988	1984	1985	1986	1987	1988
ARTIFICIAL (CELL.) FIBERS											
FILAMENT YARN [a]											
TEXTURED	310.0004	129	101	102	614	248	337	298	242	1323	864
OTHER [b]	310.0026	8614	10412	7002	5428	12049	10051	13859	9207	7768	18651
MONOFILAMENTS	309.0110	12	79	228	285	258	66	178	651	413	629
STRIPS	309.2210	79	37	14	100	102	85	44	16	96	86
SUBTOTAL ABOVE		**8834**	**10629**	**7436**	**6427**	**12657**	**10539**	**14379**	**10116**	**9600**	**20230**
STAPLE+TOW-RAYON	309.4222	53882	35975	30887	32781	21760	37688	25546	21840	23369	17311
STAPLE-ACETATE	309.4219	2090	1849	1679	1721	2795	2337	2535	2182	2487	3435
SUBTOTAL ABOVE		**55972**	**37824**	**32566**	**34502**	**24555**	**40025**	**28081**	**24022**	**25856**	**20746**
WASTE, ADVANCED & NOT ADVANCED	309.7400	**1632**	**1207**	**2222**	**1090**	**1921**	**1062**	**601**	**1822**	**939**	**706**
SYNTHETIC (NONCELL.) FIBERS											
YARN - SINGLES											
NYLON - TEXTURED	310.0005 & .0007	32268	26894	24403	35048	55702	50916	39982	42863	64400	103805
- HIGH TENACITY [c]	310.0027	66732	69386	76870	78107	87142	62515	72294	81880	88840	121769
- OTHER	310.0029	13155	9357	10333	9142	12116	28217	19373	23099	22983	30285
POLYESTER - TEXTURED	310.0010	79753	135997	68753	25057	39592	93889	140792	69534	28774	51042
- HIGH TENACITY [c]	310.0032	9156	32137	23862	24961	27296	11064	29618	27087	29829	35602
- OTHER [d]	310.0034	5968	8934	2347	1794	3033	8371	9270	2410	2567	4341
OTHER - TEXTURED	310.0014	7673	10495	21122	18119	21702	12040	14470	27888	29402	32068
- OLEFIN	310.0040	340	555	1708	940	2874	485	766	1740	1087	3278
- OTHER	310.0044	5261	7766	6084	6799	6819	26909	32505	35562	40240	41958
MONOFILAMENTS, ALL DENIERS											
NYLON	309.0120	2848	2364	5116	6663	6660	10435	9221	12901	16246	17400
POLYESTER	309.0140	3794	5759	6256	12294	21016	10141	14128	13387	21050	35837
OTHER	309.0170	11047	11955	4775	7453	8765	22912	17491	20821	33736	41823
STRIPS	309.2220 & .2270	4460	4204	3943	4805	4361	11398	13903	12945	18837	13051
SUBTOTAL ABOVE		**242455**	**325803**	**255572**	**231182**	**297078**	**349292**	**413813**	**372117**	**397991**	**532259**
STAPLE - NYLON	309.4240	14904	11100	15037	23447	21440	21685	13854	17288	24690	24598
- POLYESTER	309.4242	178903	176697	111270	168127	143976	116843	112222	68239	90039	96891
- ACRYLIC	309.4245	162285	150729	58397	67074	130235	114377	100146	40763	47571	93145
- OLEFIN	309.4246	4368	6974	14623	21433	18794	4088	5754	12670	17842	16221
- OTHER	309.4247	8555	10695	17410	35295	24112	30566	35401	57209	77415	75185
GROUPED FILAMENTS											
NYLON	309.3220	3048	1948	3701	5483	7134	8947	4635	9480	12681	15943
POLYESTER [d]	309.3240	23693	29155	21511	20573	20438	20749	23335	18135	18148	22156
ACRYLIC	309.3250 & .3255	33807	29214	21965	24497	32971	27202	24095	19498	19459	26532
SUBTOTAL ABOVE		**429563**	**416512**	**263914**	**365929**	**399100**	**344457**	**319442**	**243282**	**307845**	**370671**
WASTE, ADVANCED & NOT ADVANCED											
- NYLON	309.7620	12465	5601	8855	11686	18840	6494	3048	4441	6047	8709
- POLYESTER	309.7630	57371	46404	59265	56412	65478	22417	17722	24245	25423	33533
- ACRYLIC	309.7640	4620	4804	6399	9569	9688	1365	1286	1372	3045	4856
- OTHER	309.7660	15203	18836	49177	35860	50386	6385	6818	15315	12710	19407
SUBTOTAL ABOVE		**89659**	**75645**	**123696**	**113527**	**144392**	**36661**	**28874**	**45373**	**47225**	**66505**
TOTAL MANUFACTURED ABOVE		828115	867620	685316	752657	879703	782036	805390	696732	789456	1011117
GLASS FIBER	309.2700 & .9700	58101	58328	61160	85378	106530	56385	57787	66134	95496	120313
GRAND TOTAL ABOVE		886216	925948	746476	838035	986233	838421	863177	762866	884952	1131430

SOURCE: U.S. Census Bureau Report EM546.

a. Includes thrown, singles and plied yarn.

b. Includes rayon tire cord and cord fabric.

c. Includes noncellulosic tire cord and cord fabric.

d. Includes zero twist yarns.

TABLE 10:
U.S. MANUFACTURED FIBER IMPORTS

ITEM	THOUSAND POUNDS	THOUSAND DOLLARS
	1989	1989
ARTIFICIAL (CELLULOSIC) FIBER		
FILAMENT YARN		
HIGH TENACITY	2456	6366
TEXTURED	1380	1776
OTHER	20591	37649
MONOFILAMENTS & STRIPS	1022	2089
SUBTOTAL ABOVE	**25449**	**47880**
STAPLE	53140	50107
TOW	800	1004
TOPS	55	148
SUBTOTAL ABOVE	**53995**	**51259**
WASTE	**574**	**206**
SYNTHETIC (NONCELLULOSIC) FIBERS		
FILAMENT YARN		
NYLON		
HIGH TENACITY	19511	36494
TEXTURED		
UP TO 450 DENIER	3550	8844
OVER 450 DENIER	14098	16308
OTHER	47182	77096
MONOFILAMENTS & STRIPS	1303	4983
SUBTOTAL ABOVE	**85644**	**143725**
POLYESTER		
HIGH TENACITY	7810	11120
TEXTURED	18939	20716
POY	16274	13290
OTHER	18931	30409
MONOFILAMENTS & STRIPS	737	1642
SUBTOTAL ABOVE	**62691**	**77177**
OTHER SYNTHETIC FILAMENT		
TEXTURED	19246	21603
OTHER	7774	22532
MONOFILAMENTS & STRIPS	6890	23405
SUBTOTAL ABOVE	**33910**	**67540**
STAPLE		
NYLON	21711	29771
POLYESTER	117697	84212
ACRYLIC	17937	19176
POLYPROPYLENE	2093	1942
OTHER	4373	6558
TOW		
NYLON	4493	4930
POLYESTER	969	1185
ACRYLIC	19583	23618
OTHER	584	630
TOPS	2977	6027
SUBTOTAL ABOVE	**192417**	**178049**
WASTE		
NYLON	23982	7826
POLYESTER	17038	4766
OTHER	7001	1744
TOTAL MANUFACTURED FIBERS ABOVE	**502701**	**580172**
OTHER MFRD. FIBER YARN & THREAD		
SEWING THREAD		
FILAMENT	1375	7184
SPUN YARN	5129	15736
SPUN YARNS		
SYNTHETIC	7865	13528
ARTIFICIAL	0	0
PUT UP FOR RETAIL SALE	601	2695
GRAND TOTAL ABOVE	**517671**	**619316**

SOURCE: U.S. Census Bureau Report IM146.

Effective January 1, 1989 the U.S. Imports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

TABLE 11:
U.S. MANUFACTURED FIBER EXPORTS

ITEM	THOUSAND POUNDS	THOUSAND DOLLARS
	1989	1989
ARTIFICIAL (CELLULOSIC) FIBER		
FILAMENT YARN		
HIGH TENACITY	956	1764
TEXTURED	1977	2198
OTHER	974	1477
MONOFILAMENTS & STRIPS	362	637
SUBTOTAL ABOVE	**4269**	**6076**
STAPLE	19196	18713
TOPS	895	269
SUBTOTAL ABOVE	**20091**	**18982**
WASTE	**11554**	**5132**
SYNTHETIC (NONCELLULOSIC) FIBERS		
FILAMENT YARN		
NYLON		
HIGH TENACITY	108014	154954
TEXTURED		
UP TO 450 DENIER	9182	35982
OVER 450 DENIER	50037	92442
OTHER	25207	57969
MONOFILAMENTS & STRIPS	1908	3345
SUBTOTAL ABOVE	**194348**	**344692**
POLYESTER		
HIGH TENACITY	39124	50197
TEXTURED	33544	45252
POY	16687	21369
OTHER	10354	15841
MONOFILAMENTS & STRIPS	3187	6648
SUBTOTAL ABOVE	**102896**	**139[illegible]7**
OTHER SYNTHETIC FILAMENT		
TEXTURED	9165	15393
OTHER	20443	84570
MONOFILAMENTS & STRIPS	8874	27904
SUBTOTAL ABOVE	**38482**	**127867**
STAPLE		
NYLON	32261	38497
POLYESTER	111985	87131
ACRYLIC	73604	54364
POLYPROPYLENE	27344	24140
OTHER	19593	62761
TOW		
NYLON	992	2375
POLYESTER	4244	6650
ACRYLIC	18532	16092
OTHER	1398	3117
TOPS	32592	35676
SUBTOTAL ABOVE	**322545**	**330803**
WASTE		
NYLON	29594	12816
POLYESTER	41872	18927
OTHER	69923	25073
TOTAL MANUFACTURED FIBERS ABOVE	**835574**	**1029675**
OTHER MFRD. FIBER YARN & THREAD		
SEWING THREAD		
FILAMENT	732	3278
SPUN YARN	0	0
SPUN YARNS		
SYNTHETIC	13793	23431
ARTIFICIAL	2	4
PUT UP FOR RETAIL SALE	7985	13662
GRAND TOTAL ABOVE	**858086**	**1070050**

SOURCE: U.S. Census Bureau Report EM522.

Effective January 1, 1989 the U.S. Exports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

TABLE 12:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN[a]
THOUSAND POUNDS

	A. SYNTHETIC (NONCELLULOSIC) YARN - SINGLES						B. SYNTHETIC (NONCELLULOSIC) STAPLE+TOW								C. SPUN YARNS				D. WASTE			
	NYLON		POLYESTER		OTHER		NYLON		POLYESTER		ACRYLIC		OTHER		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)	
COUNTRY	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
AUSTRIA	7	8	24	0	51	79	21	39	0	0	0	0	6507	150	142	0	157	124	0	0	0	0
BELGIUM/LUXEMBOURG	518	3282	0	2	10052	1105	90	37	204	964	57	0	615	44	0	0	1	0	0	0	420	46
DENMARK	0	0	0	7	0	0	0	0	0	0	0	0	56	0	0	0	0	0	2	0	0	0
FINLAND	0	0	0	6	0	0	0	0	0	0	0	0	73	0	0	0	80	0	0	0	0	0
FRANCE	6118	11784	10	311	41	1	10454	4007	515	0	42	0	214	0	1	0	353	554	0	0	966	757
GERMANY, FED. REP. OF	3176	17284	6635	9566	3370	206	18688	4499	2736	3023	10422	8540	2153	702	160	0	1964	2226	0	46	2587	3260
GREECE	0	0	0	0	1	12	0	0	0	0	0	0	0	0	0	0	605	0	0	0	0	0
IRELAND	0	0	0	41	931	787	0	0	3062	1489	0	0	0	0	0	0	0	0	0	0	0	281
ITALY	9908	7101	40	85	195	234	572	263	182	6	678	1519	256	767	0	0	2226	419	1	0	0	0
NETHERLANDS	160	1034	119	204	118	538	20	0	176	1631	0	0	32	3	0	0	0	2	0	0	2597	2990
PORTUGAL	0	0	0	0	0	294	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
SPAIN	0	26	95	0	340	66	8	0	0	8	2	456	569	31	0	0	257	0	0	82	242	0
SWITZERLAND	5	6	33	11	3	3	749	1805	68	92	135	0	769	7	0	0	67	16	0	0	315	794
UNITED KINGDOM	7625	17711	978	690	1126	1500	12990	5691	99	209	9465	13737	0	90	5	0	379	52	0	35	3133	3237
OTHER	106	98[a]	0	49[d]	101	104[h]	259	0	0	866[i]	0	0	0	0	0	0	1331	0	0	0	0	0
TOTAL WESTERN EUROPE	**27623**	**58334**	**7934**	**10972**	**16329**	**4929**	**43853**	**16341**	**7042**	**8288**	**20801**	**24252**	**11244**	**1794**	**308**	**0**	**7420**	**3395**	**3**	**163**	**10260**	**11365**
POLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROMANIA	0	0	912	86	0	0	1200	0	1174	202	0	0	0	0	0	0	1892	0	0	0	0	0
OTHER	0	0	0	11[e]	0	0	0	0	0	0	0	0	59	42[l]	0	0	1115	0	0	0	0	0
TOTAL EASTERN EUROPE	**0**	**0**	**912**	**97**	**0**	**0**	**1200**	**0**	**1174**	**202**	**0**	**0**	**59**	**42**	**0**	**0**	**3007**	**0**	**0**	**0**	**0**	**0**
CANADA	**3781**	**17777**	**3062**	**1803**	**15206**	**17432**	**15968**	**8058**	**10203**	**5697**	**6**	**6**	**2626**	**1721**	**6**	**0**	**1019**	**1460**	**4**	**367**	**12319**	**13922**
ARGENTINA	179	44	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	892	476
BRAZIL	1	0	1116	61	0	544	0	10	0	0	0	0	140	122	0	0	58	30	0	0	0	0
COSTA RICA	0	3	6428	5882	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	130
MEXICO	3610	4759	14458	19014	829	986	6	0	5454	8269	1577	2931	251	37	0	0	2048	998	0	0	7092	10768
OTHER	0	15[b]	89	944[f]	313	0	0	0	0	0	0	0	0	1[m]	0	0	285	0	0	0	0	29[o]
TOTAL OTHER AMERICA	**3790**	**4821**	**22091**	**25947**	**1142**	**1530**	**6**	**10**	**5454**	**8269**	**1577**	**2931**	**391**	**160**	**0**	**0**	**2391**	**1028**	**0**	**0**	**8064**	**11403**
BANGLADESH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HONG KONG	0	0	0	0	3	0	61	3	0	89	0	0	0	0	0	0	0	0	0	0	0	0
INDONESIA	0	0	0	0	0	0	0	0	0	370	0	0	0	0	0	0	649	0	0	0	0	0
KOREA, REP. OF	8	0	0	23	2	80	0	0	20736	41345	0	0	247	1199	0	0	268	100	0	0	2368	3962
MALAYSIA	0	0	0	0	0	0	0	0	476	87	0	0	0	0	0	0	862	425	0	0	0	0
PHILIPPINES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	0	0	0	75	0
SINGAPORE	0	0	0	157	0	0	0	0	0	0	0	0	0	0	0	0	929	0	0	0	0	43
TAIWAN	0	157	110	17285	121	6	3	0	9438	25901	81	0	2528	38	0	0	249	62	0	44	0	1120
THAILAND	0	970	5	13	0	158	0	0	0	3	0	0	0	0	0	0	719	828	0	0	0	0
OTHER	0	0	0	0	0	0	0	36[j]	12022	17269[k]	0	0	0	0	0	0	0	0	0	0	0	26[p]
TOTAL OTHER ASIA	**8**	**1127**	**115**	**17478**	**126**	**244**	**64**	**39**	**42672**	**85064**	**81**	**0**	**2775**	**1237**	**0**	**0**	**3806**	**1415**	**0**	**44**	**2443**	**5151**

TABLE 12:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN[a] *(CONTINUED)*
THOUSAND POUNDS

	A. SYNTHETIC (NONCELLULOSIC) YARN - SINGLES						B. SYNTHETIC (NONCELLULOSIC) STAPLE+TOW								C. SPUN YARNS				D. WASTE			
	NYLON		POLYESTER		OTHER		NYLON		POLYESTER		ACRYLIC		OTHER		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)	
COUNTRY	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
CHINA, PRC	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	2789	377	0	0	906	0
JAPAN	87	453	2391	5142	588	2790	701	983	10982	11052	12256	10331	4345	1999	500	0	1500	178	0	0	3723	3405
AUSTRALIA	0	46	53	0	0	5	275	604	23	94	0	0	194	95	0	0	6	4	0	0	1473	1884
EGYPT	0	0	0	258	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0
ISRAEL	2884	1746	98	229	1	90	88	169	0	0	14	0	0	0	0	0	0	0	0	0	1316	891
NEW ZEALAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH AFRICA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	37[c]	0	28[g]	0	0	0	0	0	0	70	0	0	0	0	0	268	8[n]	0	0	0	0
TOTAL M.E., A. & O.	2884	1829	151	515	1	95	363	773	26	94	86	0	194	95	0	0	274	12	0	0	2789	2775
GRAND TOTAL	38173	84341	36656	61954	33392	27020	62155	26204	77553	118666	34807	37520	21639	7050	814	0	22206	7865	7	574	40504	48021

SOURCE: U.S. Census Bureau Report IM146

+ Less than 1 thousand pounds.

For 1988 the commodity numbers are:

A. Nylon 310.0107, .0108, .0149, .0207, .0208 & .0249.
Polyester 310.0110, .0150, .0210 & .0250.
Other 310.0114, .0170, .0214, .0270, .0530, .0550, .0630 & .0650.

B. Nylon 309.3030, .3200, .4331 & .4351.
Polyester 309.3040, .3340, .4336 & .4361.
Acrylic 309.3050, .3350 & .4366.
Other 309.3065, .3365, .4341, .4371 & .4390.

C. Artificial (Cellulosic) 310.4005, .4030, .5005 & .5030.
Synthetic (Noncellulosic) 310.4015, .4027, .4046, .4047, .4050, .5015, .5046, .5047, .5049 & .5051.

D. Artificial (Cellulosic) 309.6615 & .7510.
Synthetic (Noncellulosic) 309.6625, .6630, .6645, .6660, .7000, .7525, .7530, .7540 & .7555.

For 1989 the Harmonized Tariff Schedule numbers are:

A. Nylon 5402.10.30.20, 5402.10.30.40, 5402.10.60.00, 5402.31.30.00, 5402.31.60.00, 5402.32.30.00, 5402.32.60.00, 5402.41.00.20, 5402.41.00.40, 5402.51.00.00 & 5402.61.00.00.
Polyester 5402.20.30.20, 5402.20.30.40, 5402.20.60.00, 5402.33.30.00, 5402.33.60.00, 5402.42.00.00, 5402.43.00.20, 5402.43.00.40, 5402.52.00.00 & 5402.62.00.00.
Other 5402.39.30.00, 5402.39.30.10, 5402.39.30.90, 5402.39.60.00, 5402.39.60.10, 5402.39.60.90, 5402.49.00.10, 5402.49.00.30, 5402.49.00.60, 5402.49.00.80, 5402.59.00.00 & 5402.69.00.00.

B. Nylon 5503.10.00.00 & 5501.10.00.00.
Polyester 5503.20.00.00 & 5501.20.00.00.
Acrylic 5503.30.00.00 & 5501.30.00.00.
Other 5503.40.00.00, 5503.90.00.00 & 5501.90.00.00.

C. Artificial (Cellulosic) 5510.00.00.00, 5510.90.20.00, 5510.12.00.00, 5510.90.40.00, 5510.20.00.00, 5510.30.00.00 & 5510.90.60.00.
Synthetic (Noncellulosic) 5509.11.00.00, 5509.21.00.00, 5509.51.30.00, 5509.31.00.00, 5509.41.00.00, 5509.69.20.00, 5509.99.20.00, 5509.12.00.00, 5509.22.00.10, 5509.22.00.90, 5509.51.60.00, 5509.32.00.00, 5509.42.00.00, 5509.69.40.00, 5509.99.40.00, 5509.52.00.00, 5509.53.00.30, 5509.53.00.60, 5509.59.00.00, 5509.61.00.00, 5509.62.00.00, 5509.69.60.00, 5509.91.00.00, 5509.92.00.00 & 5509.99.60.00.

D. Artificial (Cellulosic) 5505.20.00.00.
Synthetic (Noncellulosic) 5505.10.00.20, 5505.10.00.40 & 5505.10.00.60.

a. Turkey 76, Sweden 22
b. Peru 13, Haiti 2
c. Morocco 37
d. Turkey 49
e. Yugoslavia 11
f. Ecuador 632, Peru 171, El Salvador 80, Colombia 41, Honduras 20
g. Nigeria 28
h. Turkey 104
i. India 36
j. Turkey 866
k. India 17269
l. Germany, Dem. Rep. 42
m. Venezuela 29
n. Mozambique 8
o. Venezuela 1
p. India 26

GRAPH 6:
IMPORTS VS. EXPORTS OF MANUFACTURED FIBER

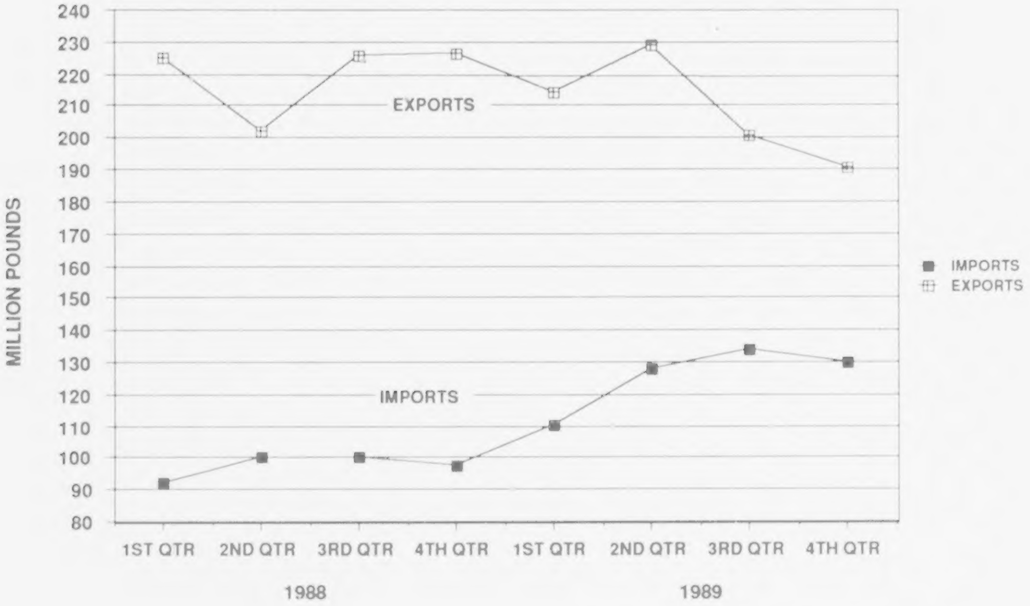


TABLE 13:
MANUFACTURED FIBER QUARTERLY TRADE BALANCE
MILLION POUNDS

	ARTIFICIAL (CELLULOSIC) YARN & MONOFIL			ARTIFICIAL (CELLULOSIC) STAPLE+TOW			SYNTHETIC (NONCELLULOSIC) YARN & MONOFIL			SYNTHETIC (NONCELLULOSIC) STAPLE+TOW			ARTIFICIAL (CELLULOSIC) WASTE			SYNTHETIC (NONCELLULOSIC) WASTE			TOTAL		
	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL
1988																					
1ST QUARTER	4.0	2.4	(1.6)	3.3	5.1	1.8	29.8	74.0	44.2	43.3	111.9	68.6	+	0.6	0.6	11.8	31.0	19.2	92.2	225.0	132.8
2ND QUARTER	4.0	3.9	(0.1)	4.1	7.0	2.9	28.1	70.3	42.2	53.7	88.3	34.6	0	0.4	0.4	10.6	32.1	21.5	100.5	202.0	101.5
3RD QUARTER	4.4	3.7	(0.7)	6.0	6.8	0.8	30.2	79.1	48.9	51.0	100.6	49.6	0	0.7	0.7	8.6	35.1	26.5	100.2	226.0	125.8
4TH QUARTER	5.2	2.6	(2.6)	6.9	5.6	(1.3)	28.1	73.6	45.5	48.1	98.3	50.2	+	0.2	0.2	9.5	46.1	36.6	97.8	226.4	128.6
TOTAL	**17.6**	**12.6**	**(5.0)**	**20.3**	**24.5**	**4.2**	**116.2**	**297.0**	**180.8**	**196.1**	**399.1**	**203.0**	**+**	**1.9**	**1.9**	**40.5**	**144.3**	**103.8**	**390.7**	**879.4**	**488.7**
1989																					
1ST QUARTER	6.1	1.5	(4.6)	15.1	6.0	(9.1)	38.9	85.3	46.4	41.0	80.3	39.3	0.2	3.4	3.2	9.2	38.1	28.9	110.5	214.6	104.1
2ND QUARTER	5.7	0.3	(5.4)	13.3	4.6	(8.7)	49.3	90.2	40.9	49.2	91.3	42.1	0.2	3.9	3.7	10.3	38.6	28.3	128.0	228.9	100.9
3RD QUARTER	7.1	1.5	(5.6)	12.4	6.0	(6.4)	51.5	78.9	27.4	50.1	78.0	27.9	0.1	2.1	2.0	12.6	34.6	22.0	133.8	201.1	67.3
4TH QUARTER	6.5	1.0	(5.5)	13.2	3.5	(9.7)	42.5	81.3	38.8	52.1	72.9	20.8	+	2.2	2.2	15.9	30.1	14.2	130.2	191.0	60.8
TOTAL	**25.4**	**4.3**	**(21.1)**	**54.0**	**20.1**	**(33.9)**	**182.2**	**335.7**	**153.5**	**192.4**	**322.5**	**130.1**	**0.5**	**11.6**	**11.1**	**48.0**	**141.4**	**93.4**	**502.5**	**835.6**	**333.1**

SOURCES: The fiber import and export data are from the U.S. Bureau of the Census (Reports IM145X and EM522).

TABLE 14:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

	1989												YEAR TO DATE	
ITEMS & COUNTRY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	0	0	6	1	4	0	139	0	37	112	134	77	510	
BRAZIL	53	110	55	0	54	76	22	53	53	26	0	53	555	
CANADA	745	619	686	613	656	532	399	634	533	747	629	403	7196	
CHILE	44	22	22	22	22	44	48	0	44	0	0	44	312	
GERMANY, FED. REP. OF	784	515	697	452	436	362	521	928	784	964	1389	240	8072	
IRELAND	37	0	36	138	34	36	107	69	104	0	70	35	666	
JAPAN	55	121	122	185	110	206	57	81	72	42	71	33	1155	
KOREA, REP. OF	66	22	0	56	0	22	11	3	0	14	0	0	194	
MEXICO	156	99	171	45	153	144	213	141	169	124	122	80	1617	
NETHERLANDS	61	239	261	173	204	380	262	413	302	382	292	293	3262	
UNITED KINGDOM	75	68	113	135	75	66	84	40	71	47	55	31	860	
ALL OTHER COUNTRIES [a]	40	24	30	8	168	62	363	79	232	16	11	17	1050	
TOTAL ARTIFICIAL YARN	**2116**	**1839**	**2199**	**1828**	**1916**	**1930**	**2226**	**2441**	**2401**	**2474**	**2773**	**1306**	**25449**	**17641**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	323	422	377	226	381	430	394	568	39	482	206	406	4254	
CANADA	4757	1990	4093	3462	3409	2370	1638	4140	3000	3512	3766	2643	38780	
CHINA, PRC	104	0	369	0	752	0	110	0	0	0	111	0	1446	
GERMANY, DEM. REP.	0	0	95	43	82	80	44	0	0	0	0	0	344	
GERMANY, FED. REP. OF	68	67	95	116	124	142	208	179	236	183	126	47	1591	
JAPAN	150	521	422	263	107	60	84	61	174	147	139	45	2173	
SWITZERLAND	9	25	41	37	65	40	286	7	14	37	32	22	615	
TAIWAN	28	0	28	88	320	0	264	176	0	176	183	179	1442	
UNITED KINGDOM	265	225	1	47	69	42	67	135	130	190	45	87	1303	
ALL OTHER COUNTRIES [b]	273	241	123	138	111	255	42	261	126	239	131	107	2047	
TOTAL ARTIFICIAL STAPLE+TOW	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**	**4966**	**4739**	**3536**	**53995**	**20401**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	30	46	0	11	38	1479	1	959	774	0	14	3352	
BELGIUM	0	56	115	171	343	236	568	685	399	323	492	1022	4410	
BRAZIL	106	63	170	30	140	201	57	191	92	114	49	49	1262	
CANADA	3437	2926	2969	2399	3327	3304	2445	3580	3717	3978	3167	2650	37899	
COSTA RICA	252	487	591	433	415	517	537	515	657	541	319	621	5885	
ECUADOR	91	26	144	0	58	23	71	33	33	36	117	0	632	
FRANCE	1180	1151	1079	1159	1159	1085	972	799	516	1432	794	1064	12390	
GERMANY, FED. REP. OF	2231	2204	2641	2514	2357	3691	2202	1988	2515	1844	2492	1661	28340	
ISRAEL	299	217	172	149	285	244	117	124	103	98	91	151	2050	
ITALY	924	323	873	859	1031	132	489	526	620	568	546	573	7464	
JAPAN	469	610	568	609	548	502	845	1110	960	1304	1084	811	9420	
KOREA, REP. OF	10	49	7	81	98	42	89	0	59	17	97	0	549	
MEXICO	1447	2222	2385	1857	2527	2911	2490	2806	2210	1691	1060	1130	24736	
NETHERLANDS	68	193	267	338	69	63	398	104	7	381	38	4	1930	
SINGAPORE	0	25	0	33	0	33	16	16	16	0	30	0	169	
TAIWAN	50	175	650	1296	2844	3217	3133	2680	1259	1138	1183	368	17993	
THAILAND	65	64	69	67	63	171	124	142	70	96	95	76	1102	
UNITED KINGDOM	1482	1357	1409	1649	1790	1506	1635	2014	1437	2234	1841	1631	19985	
ALL OTHER COUNTRIES [c]	36	175	221	260	67	330	189	324	443	196	310	126	2677	
TOTAL SYNTHETIC YARN	**12147**	**12353**	**14376**	**13904**	**17132**	**18246**	**17856**	**17638**	**16072**	**16765**	**13805**	**11951**	**182245**	**116278**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	3	9	13	1	0	79	0	11	2	57	14	189	
AUSTRALIA	31	160	1	82	16	43	149	78	0	134	24	54	772	
BELGIUM	47	99	60	56	67	7	7	378	35	368	16	203	1343	
CANADA	1413	737	1481	1489	1292	874	622	818	1242	1417	2143	2111	15639	
FRANCE	230	304	253	405	388	336	136	519	102	573	416	428	4090	
GERMANY, FED. REP. OF	1985	1758	1318	1293	1491	1780	1084	2057	753	1440	1287	811	17057	
INDIA	0	0	3772	3400	709	49	1772	2893	3690	992	0	36	17313	
IRELAND	280	480	305	348	0	36	0	0	0	0	39	0	1488	
ITALY	482	394	206	46	61	34	70	193	264	217	217	358	2542	
JAPAN	1773	1757	2303	2770	2429	1826	1929	2894	1648	2554	2166	2146	26195	
KOREA, REP. OF	2297	3387	3933	4165	5687	4876	4806	2638	3190	4035	1270	2960	43244	
MEXICO	1049	372	420	1016	783	462	579	797	434	464	1599	3097	11072	
NETHERLANDS	31	103	99	81	56	105	21	617	365	44	3	10	1535	
SPAIN	8	0	178	39	65	128	0	0	0	34	0	12	464	
SWITZERLAND	146	165	134	166	125	42	242	214	88	128	305	88	1843	
TAIWAN	262	235	215	808	917	2057	2093	1994	4020	3424	6973	3024	26022	
TURKEY	18	0	0	0	111	37	90	105	0	269	162	74	866	
UNITED KINGDOM	2318	2304	1643	2107	2671	1229	1645	810	1535	1139	1100	1162	19663	
ALL OTHER COUNTRIES [d]	2	53	45	56	29	28	0	241	111	42	205	268	1080	
TOTAL SYNTHETIC STAPLE+TOW	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**	**17276**	**17982**	**16856**	**192417**	**196154**

a. Belgium 617, Italy 148, Taiwan 68, China, PRC 51, France 46, Greece 41, Norway 32, Singapore 23, Egypt 21, India 2, Uruguay 1.

b. Poland 436, Finland 274, Australia 217, Italy 194, Romania 175, Korea, Rep. of 171, France 148, Sweden 131, Belgium 73, Spain 47, Chile 46, Norway 40, Peru 37, Netherlands 28, India 18, Thailand 11, Mexico 1.

c. Ireland 851, Portugal 342, Egypt 258, Turkey 201, Peru 182, Austria 124, Spain 92, Switzerland 92, Romania 86, China, PRC 82, El Salvador 80, Australia 51, Colombia 41, Morocco 37, Nigeria 35, Sweden 32, Hong Kong 31, Honduras 20, Greece 11, Yugoslavia 11, Denmark 9, Finland 6, Haiti 2, Norway 1.

d. Romania 243, Indonesia 176, Venezuela 176, Israel 169, Brazil 132, Hong Kong 92, Malaysia 44, Germany, Dem. Rep. 42, Thailand 3, China, PRC 2, Peru 1.

Effective January 1, 1989 the U.S. Manufactured Imports for Consumption by Country of Origin are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

Selected U.S. Manufactured Imports for Consumption by Country of Origin for 1988 are published in the ***Textile Organon***, February 1989 issue, page 31.

TABLE 15:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	114	266	408	205	111	192	176	252	148	175	202	207	2456	
TEXTURED	180	1	0	24	0	27	497	58	275	222	65	31	1380	
OTHER	1726	1532	1671	1449	1732	1673	1402	2036	1873	2048	2433	1016	20591	
MONOFILAMENTS & STRIPS	96	40	120	150	73	38	151	95	105	29	73	52	1022	
SUBTOTAL ABOVE	**2116**	**1839**	**2199**	**1828**	**1916**	**1930**	**2226**	**2441**	**2401**	**2474**	**2773**	**1306**	**25449**	17641
STAPLE	5924	3481	5624	4403	5312	3419	3113	5451	3512	4825	4631	3445	53140	
TOW	47	0	0	7	103	0	24	72	207	141	108	91	800	
TOPS	6	10	20	10	5	0	0	4	0	0	0	0	55	
SUBTOTAL ABOVE	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**	**4966**	**4739**	**3536**	**53995**	20401
WASTE	**18**	**122**	**47**	**213**	**0**	**0**	**0**	**94**	**44**	**0**	**0**	**36**	**574**	7
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1037	1093	1506	1578	1829	1964	1480	1706	1698	2290	1692	1638	19511	
TEXTURED														
UP TO 450 DENIER	385	217	359	285	319	315	333	428	270	234	237	168	3550	
OVER 450 DENIER	1311	1054	1428	1294	1241	654	943	865	1164	1360	1191	1593	14098	
OTHER	3820	3306	3786	3845	4296	5210	4007	4096	3664	3623	3627	3902	47182	
MONOFILAMENTS & STRIPS	72	159	58	113	143	116	120	63	89	132	176	62	1303	
SUBTOTAL ABOVE	**6625**	**5829**	**7137**	**7115**	**7828**	**8259**	**6883**	**7158**	**6885**	**7639**	**6923**	**7363**	**85644**	38173
POLYESTER														
HIGH TENACITY	957	880	909	488	797	703	361	603	557	686	445	424	7810	
TEXTURED	883	1673	1738	1766	1775	2385	1747	2230	1822	1231	911	778	18939	
POY	0	40	642	1088	2744	3214	3170	2407	989	821	936	223	16274	
OTHER	1152	1481	1719	1740	1324	1567	1551	1815	1487	2012	1968	1115	18931	
MONOFILAMENTS & STRIPS	65	80	34	55	24	70	73	65	171	27	50	23	737	
SUBTOTAL ABOVE	**3057**	**4154**	**5042**	**5137**	**6664**	**7939**	**6902**	**7120**	**5026**	**4777**	**4310**	**2563**	**62691**	36656
OTHER SYNTHETIC FILAMENT														
TEXTURED	2057	1685	1550	1054	2074	1555	1199	1981	1981	2030	1407	673	19246	
OTHER	261	386	339	274	171	136	1049	1015	944	1276	808	1115	7774	
MONOFILAMENTS & STRIPS	147	299	308	324	395	357	1823	364	1236	1043	357	237	6890	
SUBTOTAL ABOVE	**2465**	**2370**	**2197**	**1652**	**2640**	**2048**	**4071**	**3360**	**4161**	**4349**	**2572**	**2025**	**33910**	41449
STAPLE														
NYLON	1726	1896	1845	1592	1422	1273	1445	1611	1396	2017	2716	2772	21711	
POLYESTER	5584	5594	10047	10627	10327	8674	9941	11597	12729	10748	11419	10410	117697	
ACRYLIC	1934	1028	1576	1518	1206	1511	1335	2194	839	1868	1509	1419	17937	
POLYPROPYLENE	44	55	197	351	93	220	298	55	150	374	148	108	2093	
OTHER	172	1040	651	740	167	165	259	245	83	272	371	208	4373	
TOW														
NYLON	237	433	257	504	341	315	225	524	221	623	406	407	4493	
POLYESTER	47	78	131	49	140	114	31	32	203	102	0	42	969	
ACRYLIC	2023	1709	1127	2522	2868	1462	1574	837	1751	1197	1235	1278	19583	
OTHER	117	120	146	0	0	14	0	15	0	0	15	157	584	
TOPS	488	358	398	437	334	201	216	136	116	75	163	55	2977	
SUBTOTAL ABOVE	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**	**17276**	**17982**	**16856**	**192417**	**196154**
WASTE														
NYLON	1971	1804	1754	2087	1949	2027	1769	2266	1265	2170	2724	2196	23982	
POLYESTER	999	340	730	1029	846	973	1475	2106	1821	1942	2028	2749	17038	
OTHER	396	725	477	486	547	389	326	675	897	850	754	479	7001	
TOTAL MANUFACTURED FIBERS ABOVE	**35996**	**32985**	**41602**	**42307**	**44708**	**40933**	**42113**	**47993**	**43707**	**46443**	**44805**	**39109**	**502701**	**390985**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	229	84	46	26	74	73	105	171	124	198	128	117	1375	
SPUN YARN	492	396	370	287	418	406	466	798	368	374	412	342	5129	
SPUN YARNS														
SYNTHETIC	517	515	517	258	677	1019	937	801	902	755	529	438	7865	
ARTIFICIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	
PUT UP FOR RETAIL SALE	71	50	27	37	74	39	128	63	21	32	26	33	601	
GRAND TOTAL ABOVE	**37305**	**34030**	**42562**	**42915**	**45951**	**42470**	**43749**	**49826**	**45122**	**47802**	**45900**	**40039**	**517671**	**481050**

SOURCE: U.S. Census Bureau Report IM145X.

Effective January 1,1989 the U.S. Imports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Imports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 32.

TABLE 16:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	9	13	45	26	30	16	74	117	78	82	66	400	956	
TEXTURED	463	17	29	1	29	28	1009	26	26	0	16	333	1977	
OTHER	694	63	18	60	21	15	51	30	6	5	3	8	974	
MONOFILAMENTS & STRIPS	90	0	7	93	5	9	21	12	2	8	34	81	362	
SUBTOTAL ABOVE	**1256**	**93**	**99**	**180**	**85**	**68**	**1155**	**185**	**112**	**95**	**119**	**822**	**4269**	**12657**
STAPLE	2827	1786	1325	920	1659	1786	2084	2167	1495	835	1112	1200	19196	
TOPS	94	0	8	129	53	48	7	101	133	143	0	179	895	
SUBTOTAL ABOVE	**2921**	**1786**	**1333**	**1049**	**1712**	**1834**	**2091**	**2268**	**1628**	**978**	**1112**	**1379**	**20091**	**24555**
WASTE	**1303**	**559**	**1587**	**1116**	**1635**	**1108**	**1021**	**551**	**491**	**674**	**969**	**540**	**11554**	**1921**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	9331	9410	7884	16614	6326	6999	11613	7987	7577	6351	9433	8489	108014	
TEXTURED														
UP TO 450 DENIER	522	586	719	666	819	1271	488	856	954	951	585	765	9182	
OVER 450 DENIER	4706	5051	5459	4430	4096	3626	3176	4030	3042	4025	3684	4712	50037	
OTHER	2038	2103	2133	2188	2571	2003	1669	2028	1758	2422	2077	2217	25207	
MONOFILAMENTS & STRIPS	239	258	187	131	204	303	282	134	27	45	33	65	1908	
SUBTOTAL ABOVE	**16836**	**17408**	**16382**	**24029**	**14016**	**14202**	**17228**	**15035**	**13358**	**13794**	**15812**	**16248**	**194348**	**161620**
POLYESTER														
HIGH TENACITY	3031	3122	2773	3282	4214	4080	3334	3490	2679	4170	2317	2632	39124	
TEXTURED	3651	3677	2385	2939	3208	3577	1341	2557	2583	2683	2938	2005	33544	
POY	939	1250	2204	1446	629	528	2782	289	655	4749	624	592	16687	
OTHER	1007	584	829	983	777	1186	933	722	975	738	1004	616	10354	
MONOFILAMENTS & STRIPS	208	213	203	132	302	332	275	346	353	237	338	248	3187	
SUBTOTAL ABOVE	**8836**	**8846**	**8394**	**8782**	**9130**	**9703**	**8665**	**7404**	**7245**	**12577**	**7221**	**6093**	**102896**	**90937**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1033	457	872	903	992	634	980	995	603	439	544	713	9165	
OTHER	1342	1471	1735	1730	1559	1332	1724	1527	1938	2032	2586	1467	20443	
MONOFILAMENTS & STRIPS	486	421	771	1317	927	987	687	860	675	538	726	479	8874	
SUBTOTAL ABOVE	**2861**	**2349**	**3378**	**3950**	**3478**	**2953**	**3391**	**3382**	**3216**	**3009**	**3856**	**2659**	**38482**	**44521**
STAPLE														
NYLON	2605	3265	3262	2629	3280	3985	2532	1797	2075	2333	1980	2518	32261	
POLYESTER	14048	10762	12940	12923	10675	7497	8203	8432	6815	7025	5725	6940	111985	
ACRYLIC	3326	5674	6643	6896	6342	9369	8569	6419	4571	7585	4605	3605	73604	
POLYPROPYLENE	1336	1569	1129	2264	2714	2477	1995	1454	8124	1791	1402	1089	27344	
OTHER	836	2036	1489	2562	1734	1757	2004	1412	2180	1363	1381	839	19593	
TOW														
NYLON	31	50	50	108	141	86	56	61	32	31	264	82	992	
POLYESTER	37	564	472	634	7	621	541	113	319	283	544	109	4244	
ACRYLIC	1037	1761	2185	3302	1467	829	1070	899	1013	3056	1394	519	18532	
OTHER	161	16	34	503	9	7	77	13	213	5	217	143	1398	
TOPS	847	964	1224	2191	3092	1230	1557	3000	2448	1206	4015	10818	32592	
SUBTOTAL ABOVE	**24264**	**26661**	**29428**	**34012**	**29461**	**27858**	**26604**	**23600**	**27790**	**24678**	**21527**	**26662**	**322545**	**399100**
WASTE														
NYLON	2127	2118	2159	2883	2102	2007	1852	2750	2640	2829	3296	2831	29594	
POLYESTER	4369	3980	3189	5535	3685	2726	3631	2444	3115	4007	2808	2383	41872	
OTHER	5113	6957	8080	6731	7071	5876	8304	5850	3966	4580	4330	3065	69923	
TOTAL MANUFACTURED FIBERS ABOVE	**69886**	**70757**	**74029**	**88267**	**72375**	**68335**	**73942**	**63469**	**63561**	**67221**	**61050**	**62682**	**835574**	**879703**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	13	51	43	74	9	93	41	77	46	141	69	75	732	
SPUN YARN	0	0	0	0	0	0	0	0	0	0	0	0	0	
SPUN YARNS														
SYNTHETIC	732	959	1152	1172	1944	1089	856	1532	1452	1016	860	1029	13793	
ARTIFICIAL	0	0	0	0	0	0	0	0	2	0	0	0	2	
PUT UP FOR RETAIL SALE	606	740	923	580	532	435	536	704	521	1026	731	651	7985	
GRAND TOTAL ABOVE	**71237**	**72507**	**76147**	**90093**	**74860**	**69952**	**75375**	**65782**	**65582**	**69404**	**62710**	**64437**	**858086**	

SOURCE: U.S. Census Bureau Report EM522.

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U.S. Monthly Exports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 33.

TABLE 17:
QUARTERLY MANUFACTURED FIBER DATA

MILLION POUNDS

ITEM	1987					1988					1989				
	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
						YARN+MONOFILAMENTS									
CELLULOSIC YARN [d]															
PRODUCTION	**46.2**	**46.7**	**45.2**	**53.0**	**191.1**	**49.1**	**54.4**	**54.9**	**55.5**	**213.9**	**52.7**	**55.8**	**56.7**	**52.3**	**217.5**
SHIPMENTS - DOMESTIC	39.2	43.6	40.2	43.8	166.8	41.4	47.3	45.8	48.1	182.6	46.0	50.3	45.6	45.4	187.3
- EXPORT	5.0	5.9	6.1	7.9	24.9	8.7	7.9	10.0	7.5	34.1	6.8	7.9	8.4	8.6	31.7
TOTAL SHIPMENTS	**44.2**	**49.5**	**46.3**	**51.7**	**191.7**	**50.1**	**55.2**	**55.8**	**55.6**	**216.7**	**52.8**	**58.2**	**54.0**	**54.0**	**219.0**
ENDING STOCK	**16.8**	**14.0**	**12.9**	**14.2**		**13.2**	**12.4**	**11.5**	**11.4**		**11.3**	**8.9**	**11.6**	**9.9**	
IMPORTS	3.0	2.5	2.7	4.4	12.6	4.0	4.0	4.4	5.2	17.6	6.1	5.7	7.1	6.5	25.4
TOTAL AVAILABLE	**42.2**	**46.1**	**42.9**	**48.2**	**179.4**	**45.4**	**51.3**	**50.2**	**53.3**	**200.2**	**52.1**	**56.0**	**52.7**	**51.9**	**212.7**
NYLON															
PRODUCTION	**414.1**	**427.5**	**432.9**	**422.7**	**1697.2**	**431.7**	**440.0**	**428.8**	**427.0**	**1727.5**	**436.9**	**447.5**	**434.8**	**440.0**	**1759.2**
SHIPMENTS - DOMESTIC	389.3	394.8	405.8	364.4	1554.3	387.8	395.4	391.1	398.1	1572.4	387.9	399.7	400.9	386.8	1575.3
- EXPORT	32.1	37.9	33.7	35.8	139.5	39.6	38.1	41.5	46.8	166.0	42.7	38.9	34.8	40.4	156.8
TOTAL SHIPMENTS	**421.4**	**432.7**	**439.5**	**400.2**	**1693.8**	**427.4**	**433.5**	**432.6**	**444.9**	**1738.4**	**430.6**	**438.6**	**435.7**	**427.2**	**1732.1**
ENDING STOCK	**125.5**	**120.3**	**113.7**	**136.2**		**140.5**	**147.0**	**143.2**	**125.3**		**131.6**	**140.5**	**139.6**	**152.4**	
OLEFIN [a]															
PRODUCTION	**255.8**	**283.9**	**287.4**	**306.7**	**1133.8**	**307.6**	**313.8**	**296.6**	**306.1**	**1224.1**	**313.8**	**324.6**	**310.4**	**308.4**	**1257.2**
SHIPMENTS - DOMESTIC	261.5	281.8	287.5	304.7	1135.5	303.5	307.7	288.8	299.8	1199.8	308.0	315.5	301.6	300.9	1226.0
- EXPORT	2.7	1.7	1.8	2.1	8.3	2.7	5.9	6.0	5.2	19.8	5.2	6.4	7.2	3.7	22.5
TOTAL SHIPMENTS	**264.2**	**283.5**	**289.3**	**306.8**	**1143.8**	**306.2**	**313.6**	**294.8**	**305.0**	**1219.6**	**313.2**	**321.9**	**308.8**	**304.6**	**1248.5**
ENDING STOCK	**54.5**	**54.9**	**53.0**	**52.9**		**54.3**	**54.5**	**56.3**	**57.4**		**58.0**	**60.7**	**62.3**	**66.1**	
POLYESTER															
PRODUCTION	**287.7**	**303.3**	**293.9**	**293.8**	**1178.7**	**284.5**	**313.5**	**304.6**	**326.2**	**1228.8**	**314.4**	**325.3**	**306.4**	**262.9**	**1209.0**
SHIPMENTS - DOMESTIC	266.8	285.2	280.8	280.6	1113.4	266.7	291.9	278.2	320.6	1157.4	292.0	303.6	264.1	251.0	1110.7
- EXPORT	16.4	18.4	15.8	16.3	66.9	18.8	17.8	16.7	21.4	74.7	16.0	13.1	13.3	16.2	58.6
TOTAL SHIPMENTS	**283.2**	**303.6**	**296.6**	**296.9**	**1180.3**	**285.5**	**309.7**	**294.9**	**342.0**	**1232.1**	**308.0**	**316.7**	**277.4**	**267.2**	**1169.3**
ENDING STOCk	**115.4**	**115.1**	**112.4**	**109.3**		**108.3**	**112.1**	**121.8**	**106.0**		**112.4**	**121.0**	**150.0**	**145.7**	
TOTAL NONCELLULOSIC ABOVE															
PRODUCTION	**957.6**	**1014.7**	**1014.2**	**1023.2**	**4009.7**	**1023.8**	**1067.3**	**1030.0**	**1059.3**	**4180.4**	**1065.1**	**1097.4**	**1051.6**	**1011.3**	**4225.4**
SHIPMENTS - DOMESTIC	917.6	961.8	974.1	949.7	3803.2	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	966.6	938.7	3912.0
- EXPORT	51.2	58.0	51.3	54.2	214.7	61.1	61.8	64.2	73.4	260.5	63.9	58.4	55.3	60.3	237.9
SHIPMENTS	**968.8**	**1019.8**	**1025.4**	**1003.9**	**4017.9**	**1019.1**	**1056.8**	**1022.3**	**1091.9**	**4190.1**	**1051.8**	**1077.2**	**1021.9**	**999.0**	**4149.9**
ENDING STOCK	**295.4**	**290.3**	**279.1**	**298.4**		**303.1**	**313.6**	**321.3**	**268.7**		**302.0**	**322.2**	**351.9**	**364.2**	
DOMESTIC SHIPMENTS	917.6	961.8	974.1	949.7	3803.2	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	966.6	938.7	3912.0
IMPORTS -TEXTURED YARN [b]	19.3	15.1	17.2	16.9	68.5	15.7	14.7	16.1	14.1	60.6	14.4	14.7	15.0	11.8	55.9
-OTHER YARN [b]	13.3	12.4	11.9	11.3	48.9	11.2	11.1	11.9	13.4	47.6	23.3	33.0	32.5	28.6	117.4
-MONOFILAMENTS	0.8	0.9	1.0	1.1	3.8	1.8	2.3	2.0	2.0	8.1	1.2	1.6	4.0	2.1	8.9
TOTAL IMPORTS	33.4	28.4	30.1	29.3	121.2	28.7	28.1	30.0	29.5	116.3	38.9	49.3	51.5	42.5	182.2
TOTAL AVAILABLE	**951.0**	**990.2**	**1004.2**	**979.0**	**3924.4**	**986.7**	**1023.1**	**988.1**	**1048.0**	**4045.9**	**1026.8**	**1068.1**	**1018.1**	**981.2**	**4094.2**
						GLASS FIBER									
TOTAL SHIPMENTS	**366.1**	**392.5**	**383.3**	**371.2**	**1513.1**	**386.4**	**415.2**	**405.9**	**380.2**	**1587.7**	**394.2**	**407.3**	**370.4**	**390.2**	**1562.1**
IMPORTS	4.9	5.6	11.3	7.6	29.4	5.6	7.1	6.5	7.0	26.2	0.7	1.2	2.1	1.3	5.3

FOOTNOTES FOR TABLE ABOVE & OPPOSITE:

"Imports" are imports for consumption, as reported by the U.S. Census Bureau.

a. Also include film fiber as well as spunbonded polypropylene.

b. Includes singles and plied.

c. For 1987-1988, these figures are composites of the nylon, acrylic+modacrylic and polyester staple imports, i.e., Commodity Numbers 309.4331, .4351, .4336 & .4361. For 1989, Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon.***

d. Includes both rayon & acetate yarn.

e. For 1987-1988, these figures are composites of olefin and other staple imports, i.e., Commodity Numbers 309.4371, .4341 & .4390. For 1989, Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon.***

f. 1987-1989 data exclude Vinyon.

TABLE 17:
QUARTERLY MANUFACTURED FIBER DATA *(Continued)*

MILLION POUNDS

ITEM	1987					1988					1989				
	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
								STAPLE+TOW							
RAYON															
PRODUCTION	101.3	100.5	103.6	108.4	413.8	106.6	101.2	99.4	92.6	399.8	100.8	101.2	83.2		
SHIPMENTS - DOMESTIC	91.8	91.0	97.9	102.4	383.1	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6	DATA NO LONGER AVAILABLE	
- EXPORT	8.1	8.2	12.6	3.5	32.4	5.1	6.1	5.5	3.8	20.5	3.4	5.4	4.3		
TOTAL SHIPMENTS	99.9	99.2	110.5	105.9	415.5	107.0	108.1	99.5	91.9	406.5	103.1	97.1	80.9		
ENDING STOCK	23.8	25.1	18.2	20.7		20.3	13.4	13.3	14.0		11.7	15.8	18.1		
DOMESTIC SHIPMENTS	91.8	91.0	97.9	102.4	383.1	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6		
IMPORTS FOR CONSUMPTION															
STAPLE	3.9	3.8	2.6	2.7	13.0	3.2	3.8	5.5	6.5	19.0	} 15.1	13.3	12.4	13.2	54.0
GROUPED FILAMENTS	0.2	0.1	0.4	0.2	0.9	0.2	0.3	0.5	0.4	1.4					
TOTAL IMPORTS	4.1	3.9	3.0	2.9	13.9	3.4	4.1	6.0	6.9	20.4	15.1	13.3	12.4	13.2	54.0
TOTAL AVAILABLE	95.9	94.9	100.9	105.3	397.0	105.3	106.1	100.0	95.0	406.4	114.8	105.0	89.0		
NYLON															
PRODUCTION	247.4	261.0	252.8	231.2	992.4	231.5	235.9	226.6	247.8	941.8	252.9	242.0	241.0	244.8	980.7
SHIPMENTS-DOMESTIC	246.2	253.2	246.2	220.4	966.0	239.4	223.9	241.6	240.0	944.9	242.0	231.2	245.8	236.3	955.3
-EXPORT	5.3	5.0	3.7	5.5	19.5	4.3	4.3	4.9	5.5	19.0	7.5	4.8	5.4	5.5	23.2
TOTAL SHIPMENTS	251.5	258.2	249.9	225.9	985.5	243.7	228.2	246.5	245.5	963.9	249.5	236.0	251.2	241.8	978.5
ENDING STOCK	58.7	61.5	64.4	69.7		57.5	65.2	45.3	47.6		51.0	57.0	46.8	49.8	
IMPORTS	14.8	8.7	8.6	6.9	39.0	4.9	5.1	5.4	6.5	21.9	6.4	5.4	5.4	8.9	26.1
TOTAL AVAILABLE	261.0	261.9	254.8	227.3	1005.0	244.3	229.0	247.0	246.5	966.8	248.4	236.6	251.2	245.2	981.4
ACRYLIC+MODACRYLIC															
PRODUCTION	155.7	159.0	135.3	141.5	591.5	148.8	150.9	141.5	146.9	588.1	144.3	145.6	129.4	123.4	542.7
SHIPMENTS-DOMESTIC	139.4	131.6	112.8	95.5	479.3	109.0	109.3	107.3	95.5	421.1	112.9	112.4	102.8	86.7	414.8
-EXPORT	14.7	17.0	32.0	51.4	115.1	47.7	29.1	39.8	52.5	169.1	23.6	32.5	30.0	36.5	122.6
TOTAL SHIPMENTS	154.1	148.6	144.8	146.9	594.4	156.7	138.4	147.1	148.0	590.2	136.5	144.9	132.8	123.2	537.4
ENDING STOCK	67.8	78.2	68.7	63.3		55.4	67.9	62.3	61.2		69.0	69.7	66.3	66.5	
IMPORTS	3.3	4.1	4.6	3.7	15.7	3.3	4.4	3.3	4.3	15.3	9.4	11.1	8.5	8.5	37.5
TOTAL AVAILABLE	142.7	135.7	117.4	99.2	495.0	112.3	113.7	110.6	99.8	436.4	122.3	123.5	111.3	95.2	452.3
OLEFIN+VINYON[f]															
PRODUCTION	85.5	92.3	92.1	90.6	360.5	94.3	94.5	85.9	89.3	364.0	97.1	97.7	92.0	94.8	381.6
SHIPMENTS-DOMESTIC	81.1	85.7	86.1	88.2	341.1	83.8	87.6	84.8	88.0	344.2	91.6	93.5	91.4	86.9	363.4
-EXPORT	6.9	5.7	5.4	4.8	22.8	5.6	5.8	4.4	3.8	19.6	3.1	3.7	3.4	3.8	14.0
TOTAL SHIPMENTS	88.0	91.4	91.5	93.0	363.9	89.4	93.4	89.2	91.8	363.8	94.7	97.2	94.8	90.7	377.4
ENDING STOCK	31.0	31.9	32.5	30.1		35.0	36.1	32.8	30.3		32.8	33.3	30.5	34.6	
POLYESTER															
PRODUCTION	581.0	596.2	578.4	606.2	2361.8	587.4	619.5	604.3	640.6	2451.8	609.4	648.8	591.0	536.1	2385.3
SHIPMENTS-DOMESTIC	534.4	549.9	537.5	579.2	2201.0	558.3	572.5	551.2	629.8	2311.8	575.4	594.6	543.0	548.3	2261.3
-EXPORT	48.2	47.0	38.3	34.7	168.2	27.8	31.1	38.2	40.0	137.1	34.9	21.7	20.1	16.8	93.5
TOTAL SHIPMENTS	582.6	596.9	575.8	613.9	2369.2	586.1	603.6	589.4	669.8	2448.9	610.3	616.3	563.1	565.1	2354.8
ENDING STOCK	162.3	161.6	164.2	156.5		157.8	173.7	188.6	159.4		158.5	191.0	218.9	189.9	
IMPORTS	15.5	17.4	23.4	14.4	70.7	15.0	20.7	22.3	15.2	73.2	21.5	29.9	34.5	32.7	118.6
TOTAL AVAILABLE	549.9	567.3	560.9	593.6	2271.7	573.3	593.2	573.5	645.0	2385.0	596.9	624.5	577.5	581.0	2379.9
TOTAL NONCELLULOSIC															
PRODUCTION	1069.6	1108.5	1058.6	1069.5	4306.2	1062.0	1100.8	1058.3	1124.6	4345.7	1103.7	1134.1	1053.4	999.1	4290.3
SHIPMENTS-DOMESTIC	1001.1	1020.4	982.6	983.3	3987.4	990.5	993.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0	958.2	3994.8
-EXPORT	75.1	74.7	79.4	96.4	325.6	85.4	70.3	87.3	101.8	344.8	69.1	62.7	58.9	62.6	253.3
TOTAL SHIPMENTS	1076.2	1095.1	1062.0	1079.7	4313.0	1075.9	1063.6	1072.2	1155.1	4366.8	1091.0	1094.4	1041.9	1020.8	4248.1
ENDING STOCK	319.8	333.2	329.8	319.6		305.7	342.9	329.0	298.5		311.3	351.0	362.5	340.8	
DOMESTIC SHIPMENTS	1001.1	1020.4	982.6	983.3	3987.4	990.5	933.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0	958.2	3994.8
IMPORTS FOR CONSUMPTION															
3 FIBERS ABOVE[c]	33.6	30.2	36.6	25.0	125.4	23.2	30.2	31.0	26.0	110.4	37.3	46.4	48.4	50.1	182.2
OTHER N.C. STAPLE[e]	2.8	3.6	3.7	3.4	13.5	5.6	5.7	4.3	4.2	19.8	} 3.7	2.8	1.7	2.0	10.2
GROUPED FILAMENTS	12.4	12.4	12.1	13.1	50.0	14.5	17.8	15.7	17.8	65.8					
TOTAL IMPORTS	48.8	46.2	52.4	41.5	188.9	43.3	53.7	51.0	48.0	196.0	41.0	49.2	50.1	52.1	192.4
TOTAL AVAILABLE	1049.9	1066.6	1035.0	1024.8	4176.3	1033.8	1047.0	1035.9	1101.3	4218.0	1062.9	1080.9	1033.1	1010.3	4187.2

See footnotes on opposite page.

TABLE 18:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

	1989												YEAR TO DATE[a]	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1												15.1	17.3
RAYON STAPLE	DATA NO LONGER AVAILABLE													
TOTAL ARTIFICIAL (CELLULOSIC)	15.1												15.1	17.3
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9												24.9	31.3
- CARPET	86.5												86.5	74.9
- TEXTILE[f]	28.8												28.8	33.9
POLYESTER - INDUSTRIAL[d]	27.2												27.2	28.6
- TEXTILE[f]	56.2												56.2	73.2
OLEFIN[e]	106.1												106.1	105.3
TOTAL YARN	329.7												329.7	347.2
STAPLE+TOW+FIBERFILL														
NYLON	88.9												88.9	82.3
ACRYLIC+MODACRYLIC	39.2												39.2	41.7
POLYESTER	166.9												166.9	205.8
OLEFIN	30.3												30.3	31.1
TOTAL STAPLE	325.3												325.3	360.9
TOTAL SYNTHETIC (NONCELLULOSIC)	655.0												655.0	708.1
TOTAL MANUFACTURED FIBER	670.1												670.1	725.4
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7												9.7	11.7
RAYON STAPLE	DATA NO LONGER AVAILABLE													
TOTAL ARTIFICIAL (CELLULOSIC)	9.7												9.7	11.7
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8												36.8	24.4
- CARPET	61.9												61.9	63.5
- TEXTILE[f]	57.0												57.0	47.1
POLYESTER - INDUSTRIAL[d]	39.3												39.3	35.0
- TEXTILE[f]	94.5												94.5	73.5
OLEFIN[e]	68.9												68.9	53.1
TOTAL YARN	358.4												358.4	296.6
STAPLE+TOW+FIBERFILL														
NYLON	40.1												40.1	51.8
ACRYLIC+MODACRYLIC	69.5												69.5	70.5
POLYESTER	193.5												193.5	163.5
OLEFIN	34.6												34.6	31.0
TOTAL STAPLE	337.7												337.7	316.8
TOTAL SYNTHETIC (NONCELLULOSIC)	696.1												696.1	613.4
TOTAL MANUFACTURED FIBER	705.8												705.8	625.1
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL														
CARPET CLASS WOOL														
TOTAL RAW WOOL														
RAW COTTON														

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a. "Year to date" totals for stock, are the latest month's figures. **Data for Rayon staple no longer available.**

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

CELLULOSIC YARN & STAPLE+TOW PRODUCTION, SHIPMENTS & STOCK

MONTHLY 1989

MILLION POUNDS

ITEM	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
	YARN+MONOFILAMENTS													
CELLULOSIC YARN														
PRODUCTION	17.6	16.2	18.8										52.6	49.3
SHIPMENTS-Domestic	15.2	14.6	16.1										45.9	41.4
-Export	2.1	2.4	2.3										6.8	8.7
-TOTAL	17.3	17.0	18.4										52.7	50.1
ENDING STOCK	11.7	10.9	11.3										11.3	13.2
INCLUDES ACETATE AND RAYON YARN+MONOFILAMENT														
	STAPLE+TOW													
RAYON														
PRODUCTION	33.5	32.3	35.0										100.8	106.6
SHIPMENTS-Domestic	33.5	31.0	35.2										99.7	101.9
-Export	1.0	1.1	1.3										3.4	5.1
-TOTAL	34.5	32.1	36.5										103.1	107.0
ENDING STOCK	13.0	13.2	11.7										11.7	20.3

ESTIMATED U.S. MILL CONSUMPTION

MILLION POUNDS

ITEM	1988 REVISED												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1988	1987
CELLULOSIC														
YARN	14	15	16	18	16	17	17	16	17	18	17	19	200	180
STAPLE	33	36	39	36	37	37	30	38	36	37	31	30	420	410
TOTAL CELLULOSIC	**47**	**51**	**55**	**54**	**53**	**54**	**47**	**54**	**53**	**55**	**48**	**49**	**620**	**590**
NONCELLULOSIC														
YARN	310	333	342	343	341	338	310	339	342	353	345	350	4046	3933
STAPLE	345	365	377	368	365	365	338	378	368	395	367	387	4418	4385
TOTAL NONCELLULOSIC	**655**	**698**	**719**	**711**	**706**	**703**	**648**	**717**	**710**	**748**	**712**	**737**	**8464**	**8318**
TOTAL MANUFACTURED FIBER [a]	**702**	**749**	**774**	**765**	**759**	**757**	**695**	**771**	**763**	**803**	**760**	**786**	**9084**	**8908**
COTTON	300	311	339	278	303	297	226	240	307	269	292	238	3400	3738
WOOL	14	13	16	13	13	15	13	11	12	14	12	12	158	169
TOTAL FIBER	**1016**	**1073**	**1129**	**1056**	**1075**	**1069**	**934**	**1022**	**1082**	**1086**	**1064**	**1036**	**12642**	**12815**
% OF MILL CONSUMPTION														
MANUFACTURED FIBER	*69*	*70*	*69*	*73*	*71*	*71*	*74*	*76*	*71*	*74*	*72*	*76*	*72*	*70*
COTTON	*30*	*29*	*30*	*26*	*28*	*28*	*25*	*23*	*28*	*25*	*27*	*23*	*27*	*29*
WOOL	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*

a. Excludes glass fiber, acetate cigarette tow and Aramid

NONCELLULOSIC STAPLE+TOW+FIBERFILL
PRODUCTION, SHIPMENTS & STOCK
MONTHLY 1989
MILLION POUNDS

ITEM	1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
NYLON														
PRODUCTION - TOTAL	86.6	79.6	86.6										252.8	231.5
Domestic Shipments by Denier														
Less than 10	8.3	6.7	7.5										22.5	22.3
10, Less than 15	2.5	2.8	2.9										8.2	7.0
15, Less than 20	64.3	61.6	69.6										195.5	191.0
20 & Coarser	4.5	5.0	6.2										15.7	19.1
Total Domestic Shipments	79.6	76.1	86.2										241.9	239.4
Export	2.7	2.3	2.5										7.5	4.3
TOTAL SHIPMENTS	82.3	78.4	88.7										249.4	243.7
ENDING STOCK	51.8	53.0	50.9										50.9	57.5
ACRYLIC+MODACRYLIC														
PRODUCTION - TOTAL	51.1	43.9	48.8										143.8	148.8
Domestic Shipments by Denier														
Less than 4	26.4	30.2	30.1										86.7	83.8
4 & Coarser	7.9	9.9	8.5										26.3	25.2
Total Domestic Shipments	34.3	40.1	38.6										113.0	109.0
Export	7.4	6.1	10.2										23.7	47.7
TOTAL SHIPMENTS	41.7	46.2	48.8										136.7	156.7
ENDING STOCK	70.6	68.3	68.3										68.3	55.4
POLYESTER														
PRODUCTION - TOTAL	204.6	*192.4	214.5										611.5	587.4
Domestic Shipments by Denier														
Fiberfill	30.1	28.6	31.9										90.6	85.3
Less than 1.3	59.7	*58.6	67.2										185.5	165.5
1.3, Less than 2.5	51.9	*50.3	59.3										161.5	175.9
2.5, Less than 5.5	12.1	11.9	13.0										37.0	34.3
5.5, Less than 10	6.2	8.0	8.0										22.2	19.3
10 & Coarser	27.3	23.8	27.0										78.1	78.0
Total Domestic Shipments	187.3	*181.2	206.4										574.9	558.3
Domestic Shipments also Divided as														
Carpet	19.9	18.9	21.4										60.2	66.1
Other	167.4	*162.3	185.0										514.7	492.2
Export	13.2	10.9	10.9										35.0	27.8
TOTAL SHIPMENTS	200.5	*192.1	217.3										609.9	586.1
ENDING STOCK	163.5	163.8	161.0										161.0	157.8
OLEFIN														
PRODUCTION	31.7	*32.1	32.9										96.7	94.3
SHIPMENTS	31.0	*31.7	31.4										94.1	89.4
ENDING STOCK	31.0	31.4	32.9										32.9	35.0
TOTAL ABOVE														
PRODUCTION	374.0	*348.0	382.8										1104.8	1062.0
DOMESTIC SHIPMENTS [d]	332.2	*329.1	362.6										1023.9	996.1
EXPORTS [e]	23.3	19.3	23.6										66.2	79.8
TOTAL SHIPMENTS	355.5	*348.4	386.2										1090.1	1075.9
ENDING STOCK	316.9	316.5	313.1										313.1	305.7

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*. Revised

a. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier

b. Does not include saran or spandex

c. Low denier industrial included with Textile

d. Includes olefin exports

e. Excludes olefin exports

NONCELLULOSIC YARN+MONOFILAMENTS
PRODUCTION, SHIPMENTS & STOCK
MONTHLY 1989
MILLION POUNDS

	1989												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
NYLON														
INDUSTRIAL[a]														
Domestic Shipments-Tires	11.9	13.0	13.5										38.4	39.5
-Other	9.1	8.7	8.8										26.6	27.9
Export	10.3	8.8	9.9										29.0	27.0
Ending Stock	24.4	24.7	22.4										22.4	23.5
CARPET														
Domestic Shipments	71.7	73.9	79.4										225.0	228.2
Export	3.0	3.1	3.0										9.1	9.7
Ending Stock	63.5	63.3	62.8										62.8	67.0
TEXTILE[c]														
Domestic Shipments	*32.5	*31.7	33.3										97.5	92.2
Export	1.5	1.5	1.5										4.5	2.9
Ending Stock	*47.1	*48.2	46.4										46.4	50.0
TOTAL NYLON ABOVE														
PRODUCTION	***149.7**	***141.9**	**144.8**										**436.4**	**431.7**
Domestic Shipments	*125.2	*127.3	135.0										387.5	387.8
Export	14.8	13.4	14.4										42.6	39.6
TOTAL SHIPMENTS	***140.0**	***140.7**	**149.4**										**430.1**	**427.4**
ENDING STOCK	***135.0**	***136.2**	**131.6**										**131.6**	**140.5**
POLYESTER														
INDUSTRIAL[a]														
Domestic Shipments-Tires	13.3	14.0	14.2										41.5	41.1
-Other	12.5	11.2	12.6										36.3	34.3
Export	2.8	3.5	3.6										9.9	11.1
Ending Stock	35.0	31.4	30.5										30.5	28.8
TEXTILE[c]														
Domestic Shipments by Denier														
40+50 (55 & Finer)	2.2	2.5	3.3										8.0	8.2
70 (56-89)	11.4	10.8	10.6										32.8	29.1
100 (90-109)	3.8	4.0	4.5										12.3	9.4
120 (110-129) & 135 (130-144)	*1.0	*1.0	1.4										3.4	4.7
150 (145-179)	*44.7	*44.4	46.8										135.9	121.2
200 (180 & Coarser)	*7.0	*6.3	7.0										20.3	18.7
Total Textile Domestic	*70.1	*69.0	73.6										212.7	191.3
Domestic Shipments also Divided as														
Textured Yarn	*54.4	*54.0	56.1										164.5	146.7
Flat Yarn	15.7	15.0	17.5										48.2	44.6
Export - Poy	2.0	1.5	1.2										4.7	}7.7
Export - Flat	0.4	0.6	0.2										1.2	
Ending Stock	*73.6	76.9	83.1										83.1	79.5
TOTAL POLYESTER ABOVE														
PRODUCTION	**103.8**	***99.5**	**110.7**										**314.0**	**284.5**
Domestic Shipments	*95.9	*94.2	100.4										290.5	266.7
of Which Indirect Exports	*2.3*	*2.3*	*2.8*										*7.4*	*12.9*
Export	5.2	5.6	5.0										15.8	18.8
TOTAL SHIPMENTS	***101.1**	***99.8**	**105.4**										**306.3**	**285.5**
ENDING STOCK	***108.6**	**108.3**	**113.6**										**113.6**	**108.3**
OLEFIN														
PRODUCTION	**98.3**	**98.5**	**95.6**										**292.4**	**301.6**
Shipments														
Filament Yarn	25.4	25.4	21.9										72.7	67.7
Film Fiber & Other	73.1	72.0	72.3										217.4	233.3
TOTAL SHIPMENTS	**98.5**	**97.4**	**94.2**										**290.1**	**301.0**
ENDING STOCK	**53.0**	**54.1**	**55.5**										**55.5**	**53.5**
TOTAL ABOVE[b]														
PRODUCTION	***351.8**	***339.9**	**351.1**										**1042.8**	**1017.8**
DOMESTIC SHIPMENTS[d]	*319.6	*318.9	329.6										968.1	955.5
EXPORTS[e]	20.0	19.0	19.4										58.4	58.4
TOTAL SHIPMENTS	***339.6**	***337.9**	**349.0**										**1026.5**	**1013.9**
ENDING STOCK	***296.6**	***298.6**	**300.7**										**300.7**	**302.3**

See footnotes opposite.

Manufactured
FIBER REVIEW
A Monthly Summary of Fiber Production Information
Formerly The Man-Made Fiber Review
Vol. 8, No. 4 April 1989

HIGHLIGHTS

In March production of noncellulosic fiber (except aramid, saran and spandex) totaled 733.9 million pounds, 6.7% above the 687.9 million pounds produced in February. Filament yarn production rosel 3.3% to 351.1 million pounds and staple+tow rose 10.0% to 382.8 million pounds.

Shipments of noncellulosic fiber (except aramid, saran and spandex) rose in March to 735.2 million pounds, up 7.1% from the 686.3 million pounds shipped in February. Deliveries of filament yarn rose 3.3% to 349.0 million pounds and shipments of staple+tow rose 10.8% to 386.2 million pounds.

March producer exports of polyester staple+tow remained the same at 10.9 million pounds and exports of acrylic+modacrylic staple+tow rose to 10.2 million pounds, up 67.2%. For March 1989, producer exports of polyester staple+tow were 15.9% above the 9.4 million pounds exported in March 1988.

As of the end of March, stocks of noncellulosic fibers fell to 613.8 million pounds, down 0.2% from 615.1 million pounds in February. Stocks of staple+tow fell 1.1% and stocks of filament yarn rose 0.7%.

MANUFACTURED FIBER PRODUCTION DATA
MILLION POUNDS & PERCENT CHANGE

ITEM	1989 MAR	1989 FEB	% CHG 3-89/2-89	1988 MAR	% CHG 3-89/3-88	YEAR TO DATE 1989	YEAR TO DATE 1988	% CHG 1989/1988
CELLULOSIC								
YARN	18.8	16.2	+16.0	18.0	+4.4	52.6	49.3	+6.7
RAYON STAPLE	35.0	32.3	+8.4	36.3	-3.6	100.8	106.6	-5.4
TOTAL CELLULOSIC FIBER	**53.8**	**48.5**	*+10.9*	**54.3**	*-0.9*	**153.4**	**155.9**	*-1.6*
NONCELLULOSIC								
YARN								
NYLON - INDUSTRIAL	29.9	30.8	-2.9	32.6	-8.3	94.1	97.0	-3.0
- CARPET	81.9	76.8	+6.6	85.1	-3.8	239.6	239.5	--
- TEXTILE[a]	33.0	34.3	-3.8	30.8	+7.1	102.7	95.2	+7.9
POLYESTER - INDUSTRIAL	29.5	25.1	+17.5	30.3	-2.6	83.2	87.5	-4.9
- TEXTILE[a]	81.2	74.4	+9.1	65.7	+23.6	230.8	197.0	+17.2
OLEFIN	95.6	98.5	-2.9	100.9	-5.3	292.4	301.6	-3.1
TOTAL YARN	**351.1**	**339.9**	*+3.3*	**354.4**	*+1.7*	**1042.8**	**1017.8**	*+2.5*
STAPLE+TOW+FIBERFILL								
NYLON	86.6	79.6	+8.8	76.4	+13.4	252.8	231.5	+9.2
ACRYLIC+MODACRYLIC	48.8	43.9	+11.2	52.0	-6.2	143.8	148.8	-3.4
POLYESTER	214.5	192.4	+11.5	192.5	+11.4	611.5	587.4	+4.1
OLEFIN	32.9	32.1	+2.5	32.0	+2.8	96.7	94.3	+2.5
TOTAL STAPLE	**382.8**	**348.0**	*+10.0*	**352.9**	*+8.5*	**1104.8**	**1062.0**	*+4.0*
TOTAL NONCELLULOSIC FIBER	**733.9**	**687.9**	*+6.7*	**698.3**	*+5.1*	**2147.6**	**2079.8**	*+3.3*
TOTAL MANUFACTURED FIBER	**787.7**	**736.4**	*+7.0*	**752.6**	*+4.7*	**2301.0**	**2235.7**	*+2.9*

a. Includes low denier industrial nylon and polyester yarn.

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FIBER ORGANON

Formerly Textile Organon

Volume 61, No. 3 ☐ March 1990

A publication of *Fiber Economics Bureau, Inc.*

Highlights

- Manufactured Fiber Producing Industry Employment in Selected Countries... see page 51.
- 1989: A Year in Perspective...begins on page 52.
- Quarterly Manufactured Fiber Data ..see pages 66 - 67.

SHIPMENTS:

In February, total manufactured fiber shipments reached 705 million pounds, slightly above the 702 million pounds shipped in January and 5% below the 744 million pounds shipped in February 1989.

February shipments of synthetic (noncellulosic) filament rose 3% to 340 million pounds and staple+tow fell 1% to 326 million pounds.

Contributing to the increase in shipments over the previous month were nylon industrial yarn up 22% or 5 million pounds, olefin staple+tow up 14% or 4 million pounds and olefin yarn up 9 million pounds or 9%.

Year-to-date domestic shipments of manufactured fiber are down 5% and exports are down 22%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

	1990		% CHG	1989	% CHG	YEAR TO DATE		% CHG YTD
ITEM	FEB	JAN	2/90 - 1/90	FEB	2/90 - 2/89	1990	1989	1990 - 1989
ARTIFICIAL (CELLULOSIC)								
YARN	15.4	15.1	*+2.0*	17.1	*-9.9*	30.5	34.4	*-11.3*
RAYON STAPLE	23.8	28.9	*-17.6*	32.1	*-25.9*	52.7	66.6	*-20.9*
TOTAL ARTIFICIAL (CELL.)	**39.2**	**44.0**	***-10.9***	**49.2**	***-20.3***	**83.2**	**101.0**	***-17.6***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	30.3	24.9	*+21.7*	30.5	*-0.7*	55.2	61.8	*-10.7*
- CARPET	81.1	86.5	*-6.2*	77.2	*+5.1*	167.6	152.1	*+10.2*
- TEXTILE[a]	28.1	28.3	*-2.4*	33.2	*-15.4*	56.9	67.1	*-15.2*
POLYESTER - INDUSTRIAL	28.6	27.2	*+5.1*	29.7	*-3.7*	55.8	58.3	*-4.3*
- TEXTILE[a]	56.2	56.6	*-0.7*	71.2	*-21.1*	112.8	144.4	*-21.9*
OLEFIN	115.4	106.1	*+8.8*	104.3	*+10.6*	221.5	209.6	*+5.7*
TOTAL YARN	**339.7**	**330.1**	***+2.9***	**346.1**	***-1.8***	**669.8**	**693.3**	***-3.4***
STAPLE+TOW+FIBERFILL								
NYLON	74.9	88.9	*-15.7*	78.4	*-4.5*	163.8	160.7	*+1.9*
ACRYLIC+MODACRYLIC	39.6	40.3	*-1.7*	46.2	*-14.3*	79.9	87.9	*-9.1*
POLYESTER	177.3	168.6	*+5.2*	192.1	*-7.7*	345.9	397.9	*-13.1*
OLEFIN	34.5	30.3	*+13.9*	31.6	*+9.2*	64.8	62.7	*+3.3*
TOTAL STAPLE	**326.3**	**328.1**	***-0.5***	**348.3**	***-6.3***	**654.4**	**709.2**	***-7.7***
TOTAL SYNTHETIC (NONCELL.)	**666.0**	**658.2**	***+1.2***	**694.4**	***-4.1***	**1324.2**	**1402.5**	***-5.6***
TOTAL MANUFACTURED FIBER	**705.2**	**702.2**	***+0.4***	**743.6**	***-5.2***	**1407.4**	**1503.5**	***-6.4***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS[b]	669.6	669.1	*+0.1*	701.6	*-4.6*	1338.7	1415.1	*-5.4*
EXPORTS[c]	35.6	33.1	*+7.6*	42.0	*-15.2*	68.7	88.4	*-22.3*

a. Includes low denier industrial yarn.

b. Includes olefin exports.

c. Excludes olefin exports.

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March 1990

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CONTENTS

Features

Manufactured Fiber Producing Industry Employment in Selected Countries 51
- Graph 1: Manufactured Fiber Producing Industry Employment in Selected Countries 51

1989: A Year in Perspective 52 - 61
- Mill Consumption by Fiber 52
- U.S. Mill Consumption of Manufactured Fiber, Cotton & Wool 52
- Graph 2: U.S. Mill Consumption of Manufactured Fiber, Cotton & Wool 53
- Graph 3: Domestic Consumption Detail: Manufactured Fiber, Cotton & Wool 53
- Manufactured Fiber Production Annually 1961 - 1989 54
- Synthetic (Noncellulosic) Fiber Production Detail 55
- Artificial (Cellulosic) Fiber Distribution 56
- Synthetic (Noncellulosic) Fiber Distribution 57
- U.S. Mill Consumption of Fiber & Domestic Consumption of Products 58 - 59
- Producers' Waste Shipments 60
- Raw Cotton Consumption 61
- Raw Silk Deliveries 61

Industry Regulars

Total U.S. Manufactured Fiber Shipments 49

Monthly U.S. Manufactured Fiber Data 62 - 64
- Imports by Fiber 62
- Exports by Fiber 63
- Imports by Country of Origin 64

Quarterly Manufactured Fiber Data 66 - 67
- Filament Yarn Domestic Shipments 66
- Staple+Tow Domestic Shipments 67

Selected U.S. Monthly Fiber Data 65, 68
- 1989 Revised Data 65
- 1990 Data 68

GRAPH 1:
MANUFACTURED FIBER PRODUCING INDUSTRY EMPLOYMENT IN SELECTED COUNTRIES

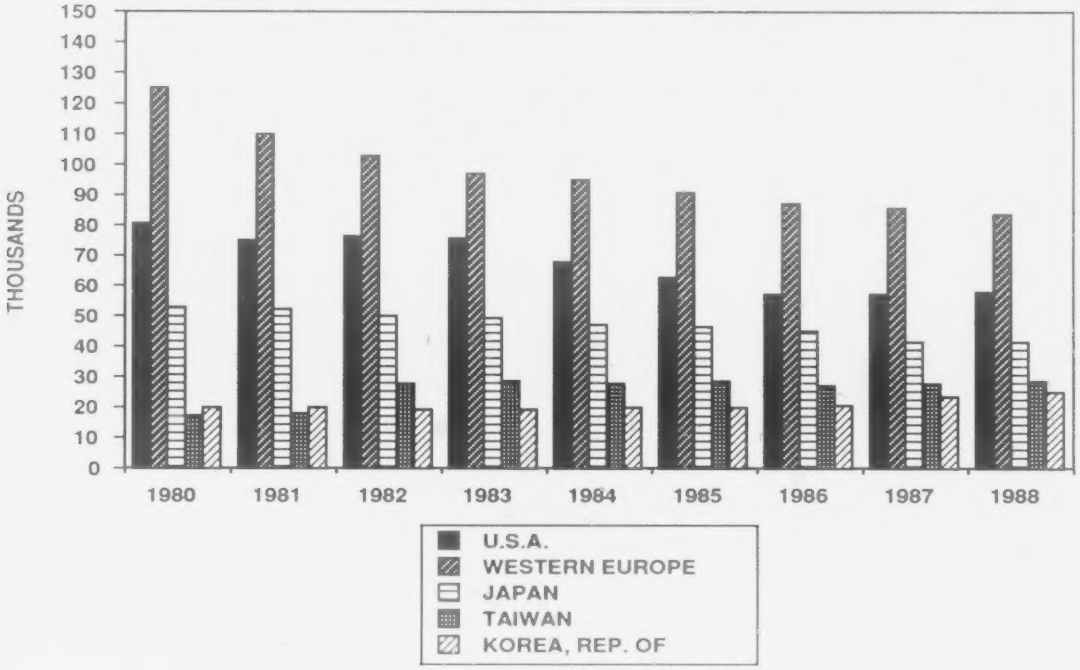


TABLE 2:
MANUFACTURED FIBER PRODUCING INDUSTRY EMPLOYMENT IN SELECTED COUNTRIES

	COUNTRY				
YEAR	U.S.A.	WESTERN EUROPE	JAPAN	TAIWAN	KOREA, REP. OF
1980	81,000	124,965	53,105	17,500	19,885
1981	74,800	109,837	52,130	18,005	19,745
1982	76,511	102,865	49,695	28,065	19,220
1983	75,418	97,425	49,200	28,575	19,230
1984	68,184	95,290	46,885	27,785	19,830
1985	62,558	90,700	46,195	28,375	20,325
1986	57,276	87,360	45,235	27,110	21,055
1987	57,090	85,385	41,570	27,600	23,335
1988	58,097	83,308	41,559	28,365	25,345

SOURCE: C.I.R.F.S., Taiwan Man-Made Fiber Industry and *Fiber Organon* estimate.
NOTE: Data include production, administration and technical department personnel.

1989: A YEAR IN PERSPECTIVE

In 1989, U.S. mill consumption of manufactured fiber decreased by 1%. This decrease in annual consumption compares to cotton mill consumption which rose by 14% and a decline of 1% in the wool mill consumption. (Graph 2)

The reason for the decline in manufactured fiber mill consumption was a decline in nylon consumption of 4% in 1989.

In comparing the total 1989 mill consumption for manufactured fiber, cotton and wool, cotton registered an increase in market share over manufactured fiber. In 1989, the manufactured fiber share of total mill consumption fell to 69%, while cotton rose to 30% and wool stood the same at 1%. (Table 4)

In 1989, exports of manufactured fiber, cotton and wool manufactures rose to 1,133 million pounds, 8% above the 1988 level of 1,045 million pounds. (Table 9)

In 1989, domestic consumption of manufactured fiber totaled 10,056 million pounds, virtually unchanged from last year, cotton totaled 6,017 million pounds, an increase of 14% and wool totaled 336 million pounds, down 9%. (Table 9)

Imports of manufactures rose by 9% in 1989 to 4,475 million pounds. Imports represented over 27% of domestic consumption in 1989. This compares to 26% in 1988, 27% in 1987 and 26% in 1986. (Table 9)

TABLE 3:
MILL CONSUMPTION BY FIBER
BILLION POUNDS

YEAR	RAYON	ACETATE[a]	NYLON[b]	POLYESTER	ACRYLIC[c]	OLEFIN	COTTON	WOOL	TOTAL
1979	0.5	0.3	2.7	3.7	0.6	0.7	3.1	0.1	11.7
1980	0.5	0.3	2.3	3.5	0.6	0.7	3.1	0.1	11.1
1981	0.5	0.2	2.2	3.5	0.5	0.8	2.7	0.2	10.6
1982	0.3	0.2	1.9	3.0	0.5	0.8	2.5	0.1	9.3
1983	0.4	0.2	2.4	3.4	0.5	1.0	2.8	0.2	10.9
1984	0.4	0.2	2.4	3.2	0.5	1.0	2.7	0.2	10.6
1985	0.5[d]		2.6	3.1	0.5	1.4	2.8	0.1	11.0
1986	0.6[d]		2.5	3.2	0.6	1.5	3.3	0.2	11.9
1987	0.6[d]		2.7	3.5	0.5	1.6	3.7	0.2	12.8
1988	0.6[d]		2.7	3.6	0.5	1.5	3.5	0.2	12.6
1989	0.6[d]		2.6	3.6	0.5	1.7	3.9	0.2	13.1

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the March 1985 issue.

a. Includes triacetate. Cigarette tow is excluded.

b. Includes Aramid for all years except 1983-1989.

c. Includes modacrylic.

d. Rayon and acetate combined.

TABLE 4:
U.S. MILL CONSUMPTION OF MANUFACTURED FIBER, COTTON & WOOL
MILLION POUNDS & *PERCENT*

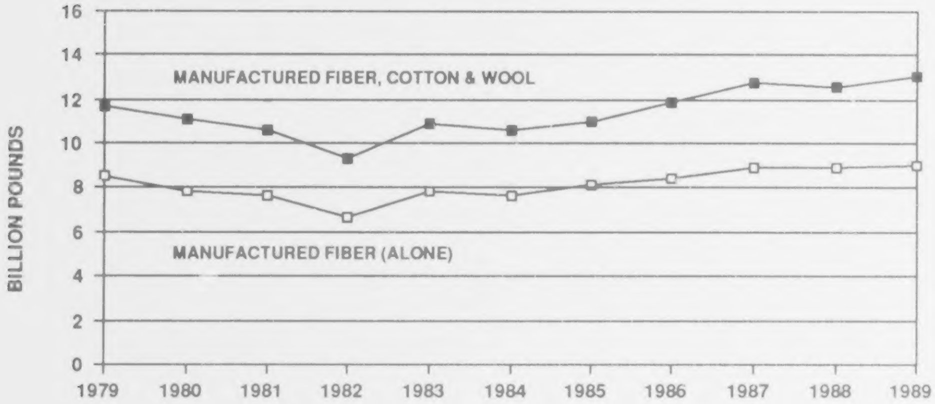
YEAR	MANUFACTURED FIBER	%[a]	%[b]	COTTON	%[a]	%[b]	WOOL	%[a]	%[b]	TOTAL	%[a]	%[b]
1979	8523.4	*+2.2*	*72.7*	3066.4	*+0.9*	*26.2*	134.4	*-5.1*	*1.1*	11724.2	*+1.7*	*100.0*
1980	7885.7	*-7.5*	*71.2*	3064.4	*-0.1*	*27.6*	137.8	*+2.5*	*1.2*	11087.9	*-5.4*	*100.0*
1981	7721.5	*-2.1*	*72.9*	2730.8	*-10.9*	*25.7*	152.7	*+10.8*	*1.4*	10605.0	*-4.4*	*100.0*
1982	6653.5	*-13.8*	*71.8*	2478.9	*-9.2*	*26.8*	129.5	*-15.2*	*1.4*	9261.9	*-12.7*	*100.0*
1983	7994.5	*+20.2*	*73.0*	2795.7	*+12.8*	*25.5*	162.5	*+25.5*	*1.5*	10952.7	*+18.3*	*100.0*
1984	7789.5	*-2.6*	*73.4*	2668.2	*-4.6*	*25.1*	163.2	*+0.4*	*1.5*	10620.9	*-3.0*	*100.0*
1985	8035.5	*+3.2*	*73.3*	2796.0	*+4.8*	*25.5*	134.7	*-17.5*	*1.2*	10966.2	*+3.3*	*100.0*
1986	8453.9	*+5.2*	*70.9*	3301.7	*+18.1*	*27.7*	164.5	*+22.1*	*1.4*	11920.1	*+8.7*	*100.0*
1987	8861.7	*+4.8*	*69.4*	3736.5	*+13.2*	*29.3*	167.6	*+1.9*	*1.3*	12765.8	*+7.1*	*100.0*
1988	9017.4	*+1.8*	*71.4*	3470.1	*-7.1*	*27.4*	156.1	*-6.9*	*1.2*	12643.6	*-1.0*	*100.0*
1989	8976.4	*-0.5*	*68.7*	3937.1	*+13.5*	*30.1*	153.9	*-1.4*	*1.2*	13067.4	*+3.4*	*100.0*

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the March 1985 issue.

a. Percent change from year to year.

b. Percent of total fiber consumption.

GRAPH 2:
U.S. MILL CONSUMPTION OF MANUFACTURED FIBER, COTTON & WOOL



GRAPH 3:
DOMESTIC CONSUMPTION DETAIL:
MANUFACTURED FIBER, COTTON & WOOL

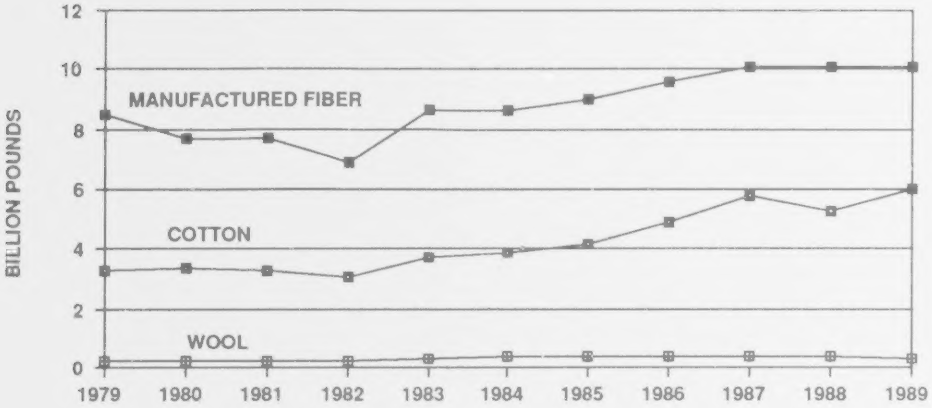


TABLE 5:
MANUFACTURED FIBER PRODUCTION
ANNUALLY 1961 - 1989
MILLION POUNDS

YEAR	ARTIFICIAL (CELLULOSIC)									SYNTHETIC (NONCELL.) FIBER c - g			TOTAL	NON-ADD TOTAL GLASS FIBER[h]
	RAYON YARN[a]			ACET YARN[b]	TOTAL YARN	STAPLE+TOW			TOTAL R+A					
	INDUS	TEXT	TOTAL			RAYON	ACET[b]	TOTAL		YARN	STAPLE	TOTAL		
1961	251.0	141.7	392.7	249.0	641.7	400.5	53.0	453.5	1095.2	497.2	253.7	750.9	1846.1	149.3
1962	272.0	148.4	420.4	305.7	726.1	500.0	46.0	546.0	1272.1	627.4	345.5	972.9	2245.0	190.3
1963	246.0	154.2	400.2	309.5	709.7	579.1	60.0	639.1	1348.8	712.8	443.2	1156.0	2504.8	191.9
1964	258.2	153.4	411.6	365.9	777.5	594.3	60.0	654.3	1431.8	847.6	559.1	1406.7	2838.5	239.5
1965	264.6	169.2	433.8	391.2	825.0	648.0	54.0	702.0	1527.0	997.7	782.4	1780.1	3307.1	282.3
1966	235.8	169.7	405.5	394.3	799.8	659.2	60.0	719.2	1519.0	1164.7	918.1	2082.8	3601.8	332.4
1967	161.2	147.9	309.1	425.6	734.7	603.4	50.0	653.4	1388.1	1215.4	1137.9	2353.3	3741.4	308.8
1968	202.4	162.9	365.3	439.9	805.2	739.1	50.0	789.1	1594.3	1662.1	1567.3	3229.4	4823.7	402.7
1969	168.6	150.6	319.2	455.2	774.7	758.8	43.0	801.8	1576.2	1766.9	1761.0	3527.9	5104.1	501.4
1970	146.4	121.2	267.6	463.2	730.8	607.4	35.0	642.4	1373.2	1793.4	1792.8	3586.2	4959.4	467.3
1971	180.4	123.0	303.4	449.3	752.7	611.7	26.5	638.2	1390.9	2187.9	2104.9	4292.8	5683.7	468.2
1972	146.7	105.0	251.7	401.4	653.1	713.2	28.0	741.2	1394.3	2773.3	2582.4	5355.7	6750.0	571.6
1973	121.7	76.4	198.1	437.2	635.3	696.7	25.0	721.7	1357.0	3339.6	2969.8	6309.4	7666.4	688.0
1974	112.9	58.9	171.8	361.6	533.4	645.4	20.0	665.4	1198.8	3443.0	2780.6	6223.6	7422.4	682.9
1975	46.1	18.7	64.8	301.3	366.1	370.9	12.0	382.9	749.0	3208.9	2676.8	5885.7	6634.7	546.5
1976	52.3	15.3	67.6	286.9	354.5	475.4	11.0	486.4	840.9	3306.4	3320.2	6626.6	7467.5	676.0
1977	55.3	15.4	70.7	282.0	352.7	527.0	8.0	535.0	887.7	3674.1	3653.8	7327.9	8215.6	786.7
1978	47.0	15.0	62.0	300.9	362.9	534.6	7.0	541.6	904.5	3830.3	3952.7	7783.0	8687.5	923.3
1979	41.7	15.1	56.8	316.6	373.4	549.4	7.0	556.4	929.8	4154.3	4282.3	8436.6	9366.4	1014.4
1980	32.2	15.0	47.2	308.5	355.7	443.3	7.0	450.3	806.0	3744.3	4148.2	7892.5	8698.5	867.3
1981	33.4	15.1	48.5	257.0	305.5	460.6	4.0	464.6	770.1	3814.8	4191.1	8005.9	8776.0	1041.1
1982	20.8	12.4	33.2	195.2	228.4	355.0	1.0	356.0	584.4	3057.4	3402.5	6459.9	7044.3	899.2
1983	25.0	11.2	36.2	227.6	263.8	374.8	1.4	376.2	640.0	3567.8	3970.6	7538.4	8178.4	1167.2
1984	28.8	12.1	40.9	198.2	239.1	389.2	0.4	389.6	628.7	3524.4	3947.3	7471.7	8100.4	1394.0
1985	NA	NA	NA	NA	204.6	352.7	0.5	353.2	557.8	3790.2	3773.3	7563.5	8121.3	NA
1986	NA	NA	NA	NA	214.8	403.7	0.5	404.2	619.0	3835.9	3991.8	7827.7	8446.7	NA
1987	NA	NA	NA	NA	191.1	413.8	0.5	414.3	605.4	4009.7	4306.2	8315.9	8921.3	NA
1988	NA	NA	NA	NA	213.9	399.8	NA	399.8	613.7	4180.3	4345.6	8525.9	9139.6	NA
1989	NA	NA	NA	NA	217.5	362.8	NA	362.8	580.3	4225.4	4290.3	8515.7	9096.0	NA

See footnotes on opposite page.

TABLE 6:
SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION DETAIL
MILLION POUNDS

	YARN+MONOFILAMENTS				STAPLE+TOW+FIBERFILL				
YEAR	NYLON[c]	OLEFIN[d]	ESTER[e]	TOTAL	NYLON[c]	ACRYL[f]	ESTER[e]	OTHER[g]	TOTAL
1961	441.7	18.9	36.6	497.2	34.2	140.1	77.4	2.0	253.7
1962	562.0	24.3	41.1	627.4	50.7	170.0	119.6	5.2	345.5
1963	630.0	30.3	52.5	712.8	61.5	209.7	166.6	5.4	443.2
1964	736.1	45.4	66.1	847.6	69.3	287.7	192.4	9.7	559.1
1965	846.1	65.6	86.0	997.7	93.7	368.4	305.2	15.1	782.4
1966	961.4	100.8	102.5	1164.7	118.7	352.9	409.3	37.2	918.1
1967	944.6	118.0	152.8	1215.4	124.6	397.7	568.1	47.5	1137.9
1968	1188.4	206.6	267.1	1662.1	162.1	521.0	827.3	56.9	1567.3
1969	1188.0	202.7	376.2	1766.9	223.2	553.0	938.8	66.0	1761.0
1970	1137.9	200.4	455.1	1793.4	216.8	491.9	1022.3	61.8	1792.8
1971	1237.9	261.8	688.2	2187.9	357.4	545.2	1142.5	59.8	2104.9
1972	1463.9	346.5	962.9	2773.3	510.6	625.9	1376.2	69.7	2582.4
1973	1582.8	423.8	1333.0	3339.6	591.9	742.1	1568.0	67.8	2969.8
1974	1560.0	463.1	1419.9	3443.0	563.7	631.2	1517.5	68.2	2780.6
1975	1295.4	442.9	1470.6	3208.9	561.9	524.6	1536.2	54.1	2676.8
1976	1372.5	515.7	1418.2	3306.4	702.7	621.0	1935.6	60.9	3320.2
1977	1512.4	554.1	1607.6	3674.1	813.7	708.8	2050.1	81.2	3653.8
1978	1654.0	596.6	1579.7	3830.3	895.9	725.7	2235.8	95.3	3952.7
1979	1781.6	639.1	1733.6	4154.3	938.8	761.1	2462.2	120.2	4282.3
1980	1631.1	632.2	1481.0	3744.3	726.6	779.2	2526.7	115.7	4148.2
1981	1580.7	642.9	1591.2	3814.8	751.8	690.8	2606.5	142.0	4191.1
1982	1241.6	585.2	1230.6	3057.4	685.0	624.1	1955.2	138.2	3402.5
1983	1492.2	716.1	1359.5	3567.8	926.4	670.5	2184.1	189.6	3970.6
1984	1577.3	747.1	1200.0	3524.4	834.8	670.8	2191.8	249.9	3947.3
1985	1514.8	954.5	1320.9	3790.2	827.7	630.8	2020.1	294.7	3773.3
1986	1605.5	1057.7	1172.7	3835.9	908.3	615.9	2132.3	335.3	3991.8
1987	1697.2	1133.8	1178.7	4009.7	992.4	591.5	2361.8	360.5	4306.2
1988	1727.5	1224.1	1228.7	4180.3	941.7	588.1	2451.8	364.0	4345.6
1989	1759.2	1257.2	1209.0	4225.4	980.7	542.7	2385.3	381.6	4290.3

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the March 1985 issue.

NA No longer available.

a. Includes industrial (high tenacity) yarn and textile (regular+intermediate tenacity) yarn+monofilaments. Beginning January 1965, the high tenacity rayon yarn of 900 denier & finer is tabulated with regular tenacity yarn.

b. Includes diacetate and triacetate. The acetate staple+tow data do not include the quantities produced for cigarette filtration purposes.

c. Excludes aramid in 1983-1988.

d. Includes polypropylene yarn+monofilaments+spunbonded+film fiber and polyethylene monofilaments+film fiber.

e. Ester means polyester. Also includes other yarn which is chiefly saran and spandex through 1982.

f. Includes modacrylic.

g. Other staple+tow includes only olefin and vinyon for recent years. Vinyon is excluded in 1987 - 1989. Earlier years' data are on pages 8 & 9 of the January 1962 ORGANON Base Book issue and page 4 of the January-February 1971issue.

h. Includes both textile and non-textile types of glass.

TABLE 7:
ARTIFICIAL (CELLULOSIC) MANUFACTURED FIBER DISTRIBUTION
ANNUALLY 1961 - 1989
MILLION POUNDS

YEAR	YARN+MONOFILAMENTS							STAPLE+TOW							TOTAL GLASS FIBER[h]				
	PRODUCERS' SHIPMENTS					IM-PORTS	DO-MESTIC CONS	PRODUCERS' SHIPMENTS					IM-PORTS	DO-MESTIC CONS	PRODUCERS' SHIPMENTS			IM-PORTS	DO-MESTIC CONS
	TO DOM. CONSUMERS[a b]			EX-PORTS	TOTAL			TO DOM. CONSUMERS			EX-PORTS	TOTAL			DO-MESTIC	EX-PORTS	TOTAL		
	RAYON	ACET	TOTAL					RAYON	ACET[b]	TOTAL									
1961	385.2	240.8	626.0	33.1	659.1	1.8	627.8	441.8	51.4	463.2	2.8	466.0	37.0	500.2	147.2	6.0	153.2	--	147.2
1962	384.6	281.7	666.3	44.9	711.2	2.6	668.9	499.2	44.4	543.6	3.8	547.4	50.9	594.5	177.5	6.6	184.1	--	177.5
1963	380.7	305.0	685.7	39.7	725.4	1.7	687.4	578.8	57.5	636.3	4.9	641.2	116.5	752.8	182.0	8.5	190.5	--	182.0
1964	399.6	363.8	763.4	28.5	791.9	5.2	768.6	575.7	57.5	633.2	7.7	640.9	114.5	747.7	220.6	11.8	232.4	--	220.6
1965	409.3	366.4	775.7	22.1	797.8	6.8	782.5	636.3	54.4	690.7	8.4	699.1	77.2	767.9	268.2	18.7	286.9	--	268.2
1966	389.6	387.5	777.1	15.2	792.3	3.7	780.8	636.5	59.0	695.5	9.4	704.9	114.8	810.3	314.2	7.9	322.1	1.1	315.3
1967	311.1	421.0	732.1	18.2	750.3	7.7	739.8	625.9	49.5	675.4	4.3	679.7	85.0	760.4	302.7	8.2	310.9	1.0	303.7
1968	353.5	426.4	779.9	17.6	797.5	14.6	794.5	720.0	48.5	768.5	5.4	773.9	125.0	893.5	383.7	12.1	395.8	0.1	383.8
1969	294.7	444.7	739.4	16.0	755.4	4.1	743.5	737.9	42.3	780.2	5.0	785.2	91.2	871.4	460.4	17.7	478.1	0.1	460.5
1970	251.1	444.8	695.9	38.3	734.2	3.7	699.6	599.9	34.3	634.2	7.8	642.0	80.6	714.8	404.2	29.9	434.1	0.7	404.9
1971	297.0	432.3	729.3	33.2	762.5	5.2	734.5	643.6	26.2	669.8	3.7	673.5	81.3	751.1	464.9	17.4	482.3	1.8	466.7
1972	246.9	385.9	632.8	23.9	656.7	10.8	643.6	690.7	27.7	718.4	2.0	720.4	51.3	769.7	559.8	17.5	577.3	9.4	569.2
1973	197.6	392.3	589.9	60.7	650.6	18.1	608.0	709.5	25.0	734.5	14.7	749.2	47.4	781.9	663.0	36.5	699.5	13.0	676.0
1974	153.1	320.3	473.4	48.8	522.2	9.2	482.6	569.5	19.7	589.2	36.0	625.2	38.7	627.9	619.3	38.0	657.3	11.5	630.8
1975	74.9	293.7	368.6	32.9	401.5	9.2	377.8	373.4	12.0	385.4	20.2	405.6	37.9	423.3	524.6	18.3	542.9	8.9	533.5
1976	65.1	249.4	314.5	40.3	354.8	25.1	339.6	461.0	11.0	472.0	35.6	507.6	43.2	515.2	663.3	35.0	698.3	14.3	677.6
1977	68.1	259.4	327.5	25.2	352.7	23.5	351.0	444.9	8.0	452.9	62.3	515.2	57.8	510.7	769.3	28.9	798.2	22.0	791.3
1978	63.0	274.6	337.6	27.6	365.2	25.7	363.3	459.2	7.0	466.2	96.5	562.7	41.1	507.3	864.9	27.7	892.6	21.8	886.7
1979	55.0	288.4	343.4	31.8	375.2	13.3	356.7	442.4	7.0	449.4	100.1	549.5	16.5	465.9	912.2	48.3	960.5	10.4	922.6
1980	47.5	269.2	316.7	32.7	349.4	8.3	325.0	390.7	7.0	397.7	61.0	458.7	10.3	408.0	867.1	48.6	915.7	7.3	874.4
1981	46.6	226.3	272.9	34.8	307.7	10.7	283.6	396.9	4.0	400.9	59.8	460.7	16.8	417.7	963.8	35.2	999.0	18.2	982.0
1982	30.1	169.0	199.1	29.8	228.9	7.0	206.1	293.7	1.0	294.7	66.5	361.2	13.4	308.1	861.5	42.9	904.4	14.1	875.6
1983	35.5	197.6	233.1	28.2	261.3	8.7	241.8	333.5	1.4	334.9	43.9	378.8	13.6	348.5	1146.1	37.4	1183.5	20.0	1166.1
1984	38.2	180.1	218.3	18.2	236.5	10.0	228.3	331.9	0.4	332.3	52.1	384.4	17.0	349.3	1250.7	58.0	1308.7	23.1	1273.8
1985	NA	NA	187.1	23.0	210.1	13.9	201.0	323.7	0.5	324.2	35.0	359.2	12.3	336.5	NA	NA	1259.6	34.7	NA
1986	NA	NA	192.1	20.2	212.3	17.0	209.1	373.0	0.5	373.5	30.8	404.3	17.4	390.9	NA	NA	1339.3	23.7	NA
1987	NA	NA	166.8	24.9	191.7	12.8	179.6	383.1	0.5	383.6	32.4	416.0	13.8	397.4	NA	NA	1513.1	29.4	NA
1988	NA	NA	182.6	34.1	216.7	17.6	200.2	386.0	NA	386.0	20.5	406.5	20.4	406.4	NA	NA	1587.6	26.2	NA
1989	NA	NA	187.3	31.7	219.0	25.4	212.7	338.2	NA	338.2	16.2	354.4	54.0	392.2	NA	NA	1553.5	NA	NA

See footnotes on opposite page.

TABLE 8:
SYNTHETIC (NONCELLULOSIC) MANUFACTURED FIBER DISTRIBUTION
ANNUALLY 1961 - 1989
MILLION POUNDS

	YARN+MONOFILAMENTS								STAPLE+TOW+FIBERFILL								
	PRODUCERS' SHIPMENTS								PRODUCERS' SHIPMENTS								
	TO DOMESTIC CONSUMERS								TO DOMESTIC CONSUMERS								
YEAR	NYLON[c]	OLEFIN[d]	ESTER[e]	TOTAL	EX-PORTS	TOTAL	IM-PORTS	DO-MESTIC CONS	NYLON[c]	ACRYL[f]	ESTER[e]	OTH[g]	TOTAL	EX-PORTS	TOTAL	IM-PORTS	DO-MESTIC CONS
1961	419.0	17.5	36.1	472.6	25.2	497.8	4.7	477.3	36.0	123.8	70.9	3.0	233.7	22.3	256.0	3.2	236.9
1962	503.1	22.5	38.1	563.7	41.1	604.8	7.0	570.7	47.5	147.1	115.3	3.6	313.5	20.3	333.8	13.9	327.4
1963	570.9	29.1	48.9	648.9	43.2	692.1	6.3	655.2	54.3	201.5	150.7	5.0	411.5	18.3	429.8	8.8	420.3
1964	685.9	44.2	63.6	793.7	62.8	856.5	3.7	797.4	68.3	263.2	177.5	8.6	517.6	34.1	551.7	19.2	536.8
1965	781.9	60.1	77.2	919.2	46.1	965.3	8.5	927.7	85.1	324.5	290.4	13.5	713.5	32.3	745.8	52.1	765.6
1966	880.0	94.6	94.8	1069.4	54.4	1123.8	12.5	1081.9	108.8	328.0	372.1	33.1	842.0	39.7	881.7	61.0	903.0
1967	907.4	116.1	144.8	1168.3	58.6	1226.9	16.4	1184.7	120.6	371.2	537.2	40.5	1069.5	60.3	1129.8	63.2	1132.7
1968	1085.8	199.0	237.2	1522.0	84.5	1606.5	33.7	1555.7	157.2	467.1	756.1	52.4	1432.8	72.2	1505.0	89.8	1522.6
1969	1063.4	188.6	364.5	1616.5	84.9	1701.4	32.5	1649.0	202.7	473.4	883.3	61.7	1621.1	100.3	1721.4	67.5	1688.6
1970	1052.6	187.0	443.0	1682.6	82.3	1764.9	120.8	1803.4	201.2	430.7	992.9	57.3	1682.1	108.6	1790.7	57.7	1739.8
1971	1206.7	246.5	646.9	2100.1	78.5	2178.6	234.4	2334.5	330.1	463.7	1111.4	58.9	1964.1	130.5	2094.6	93.3	2057.4
1972	1430.6	312.4	946.8	2689.8	87.4	2777.2	224.5	2914.3	476.6	536.0	1286.9	63.6	2363.1	174.1	2537.2	103.7	2466.8
1973	1544.7	395.4	1333.6	3273.7	127.4	3401.1	140.1	3413.8	586.8	662.0	1530.3	69.3	2848.4	233.0	3081.4	112.8	2961.2
1974	1408.8	426.3	1307.2	3142.3	140.6	3282.9	92.1	3234.4	487.8	514.9	1388.1	59.7	2450.5	195.3	2645.8	73.2	2523.7
1975	1289.7	436.1	1489.0	3214.8	104.5	3319.3	53.8	3268.6	557.9	467.3	1473.6	54.7	2553.5	209.9	2763.4	55.2	2608.7
1976	1279.3	482.0	1385.9	3147.2	138.5	3285.7	64.0	3211.2	665.4	517.3	1777.2	58.6	3018.5	247.4	3265.9	67.3	3085.8
1977	1396.2	539.6	1525.6	3461.4	159.0	3620.4	92.5	3553.9	791.7	619.8	1880.3	81.3	3373.1	270.0	3643.1	52.9	3426.0
1978	1539.1	579.7	1523.1	3641.9	197.5	3839.4	52.2	3694.1	876.4	571.6	1967.5	90.0	3505.5	411.4	3916.9	60.5	3566.0
1979	1631.3	624.2	1542.1	3797.6	319.3	4116.9	20.0	3817.6	913.2	546.6	2134.4	119.3	3713.5	593.2	4306.7	39.3	3752.8
1980	1538.9	611.7	1381.4	3532.0	301.8	3833.8	19.6	3551.6	711.2	585.3	2071.0	115.0	3482.5	689.8	4172.3	35.6	3518.1
1981	1404.3	628.3	1450.5	3483.1	282.5	3765.6	18.9	3502.0	696.4	494.1	2005.4	132.0	3327.9	820.4	4148.3	60.5	3388.4
1982	1165.6	577.0	1151.3	2893.9	220.2	3114.1	23.8	2917.7	673.3	457.9	1767.5	138.9	3037.6	369.9	3407.5	51.2	3088.8
1983	1392.4	698.6	1294.4	3385.4	187.3	3572.7	48.3	3433.7	897.1	492.2	2099.2	183.4	3671.9	281.5	3953.4	101.4	3773.3
1984	1438.1	725.6	1144.9	3308.6	189.0	3497.6	90.0	3398.6	814.4	446.7	1992.2	240.9	3494.2	442.4	3936.6	131.1	3625.3
1985	1417.4	937.6	1204.2	3559.2	240.2	3799.4	104.6	3663.8	830.3	458.7	1872.7	279.7	3441.4	372.8	3814.2	159.4	3600.8
1986	1479.6	1049.2	1092.4	3621.2	200.6	3821.8	126.1	3747.3	894.9	531.2	1998.6	312.7	3737.4	239.8	3977.2	182.8	3920.2
1987	1554.3	1135.5	1113.4	3803.2	214.7	4017.9	123.9	3927.1	966.0	479.3	2201.0	341.1	3987.4	325.6	4313.0	189.0	4176.4
1988	1572.4	1199.8	1157.4	3929.6	260.5	4190.1	116.3	4045.9	944.9	421.1	2311.8	344.2	4022.0	344.8	4366.8	196.2	4218.2
1989	1575.3	1226.0	1110.7	3912.0	237.9	4149.9	182.2	4094.2	955.3	414.8	2261.3	363.4	3994.8	253.3	4248.1	192.4	4187.2

NA No longer available.

Domestic consumption (CONS) means the sum of producers' domestic shipments and imports for consumption.

Imports for consumption (IMPORTS): yarn+monofil includes yarn singles, monofilaments & strips; staple+tow includes grouped filaments. Not included here are plied, spun & handwork yarns, sewing thread, sliver, tops & roving and waste.

a - h. See these lettered footnotes on page 55.

Synthetic (noncellulosic) data from 1940 are on page 5 of the January - February 1971 issue. Rayon+acetate data from 1911 are on page 9 of the January 1962 *Organon Base Book*.

TABLE 9:
U.S. MILL CONSUMPTION OF FIBER AND DOMESTIC CONSUMPTION OF PRODUCTS

MILLION POUNDS & *PERCENT*

	MANUFACTURED FIBER MILL CONSUMPTION=PRODUCERS' SHIPMENTS (DOM) PLUS IMPORTS FOR CONSUMPTION (IMP)																				
	ARTIFICIAL (CELLULOSIC) FIBER											SYNTHETIC (NONCELLULOSIC) FIBER										
	YARN+MONOFIL			STAPLE+TOW			WASTE					YARN+MONOFIL			STAPLE+TOW			WASTE				
YEAR	DOM	IMP	TOTAL	DOM	IMP	TOTAL	SHIP	IMP	EXP	NET	TOTAL	DOM	IMP	TOTAL	DOM	IMP	TOTAL	SHIP	IMP	EXP	NET	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1975	368.6	9.2	377.8	385.4	37.9	423.3	13.2	0.1	12.4	0.9	802.0	3214.8	53.8	3268.6	2553.5	55.2	2608.7	228.7	25.0	50.0	203.7	6081.0
1976	314.5	25.1	339.6	472.0	43.2	515.2	14.7	0.4	14.6	0.5	855.3	3147.2	64.0	3211.2	3018.5	67.3	3085.8	262.3	30.5	70.2	222.6	6519.6
1977	327.5	23.5	351.0	452.9	57.8	510.7	18.5	0.6	12.6	6.5	868.2	3461.4	92.5	3553.9	3373.1	52.9	3426.0	291.0	23.2	66.1	248.1	7228.0
1978	337.6	25.7	363.3	466.2	41.1	507.3	15.7	0.4	7.0	9.1	879.7	3641.9	52.2	3694.1	3505.5	60.5	3566.0	263.9	26.0	88.7	201.2	7461.3
1979	343.4	13.3	356.7	449.4	16.5	465.9	17.2	0.8	9.6	8.4	831.0	3797.6	20.0	3817.6	3713.5	39.3	3752.8	238.6	21.1	137.7	122.0	7692.4
1980	316.7	8.3	325.0	397.7	10.3	408.0	13.5	0.3	6.1	7.7	740.7	3532.0	19.6	3551.6	3482.5	35.6	3518.1	170.2	21.5	116.4	75.3	7145.0
1981	272.9	10.7	283.6	400.9	16.8	417.7	15.3	0.5	2.8	13.0	714.3	3483.1	18.9	3502.0	3327.9	60.5	3388.4	174.2	49.9	107.3	116.8	7007.2
1982	199.1	7.0	206.1	294.7	13.4	308.1	10.7	0.4	3.2	7.9	522.1	2893.9	23.8	2917.7	3037.6	51.2	3088.8	173.2	37.8	86.1	124.9	6131.4
1983	233.1	8.7	241.8	334.9	13.6	348.5	9.4	0.3	1.4	8.3	598.6	3385.4	48.3	3433.7	3671.9	101.4	3773.3	214.1	46.1	71.3	188.9	7395.9
1984	218.3	10.0	228.3	332.3	17.0	349.3	11.4	0.5	1.6	10.3	587.9	3308.6	90.0	3398.6	3494.2	131.1	3625.3	216.9	50.5	89.7	177.7	7201.6
1985	187.1	13.9	201.0	324.2	12.3	336.5	8.8	0.5	1.2	8.1	545.6	3559.2	104.6	3663.8	3441.4	159.4	3600.8	260.2	40.7	75.6	225.3	7489.9
1986	192.1	17.0	209.1	373.5	17.4	390.9	10.4	0.1	2.2	8.3	608.3	3621.2	126.1	3747.3	3737.4	182.8	3920.2	261.5	40.3	123.7	178.1	7845.6
1987	166.8	12.8	179.6	383.6	13.8	397.4	9.6	0.1	1.1	8.6	585.6	3803.2	123.9	3927.1	3987.4	189.0	4176.4	239.1	47.0	113.5	172.6	8276.1
1988	182.6	17.6	200.2	386.0	20.4	406.4	7.8	+	2.0	5.8	612.4	3929.6	116.3	4045.9	4022.0	196.2	4218.2	244.8	40.5	144.4	140.9	8405.0
1989	187.3	25.4	212.7	338.2	54.0	392.2	6.0	0.6	11.6	-5.0	599.9	3912.0	182.2	4094.2	3994.8	192.4	4187.2	188.5	48.0	141.4	95.1	8376.5

Continued on opposite page.

TABLE 9:
U.S. MILL CONSUMPTION OF FIBER AND DOMESTIC CONSUMPTION OF PRODUCTS *(CONTINUED)*
MILLION POUNDS & *PERCENT*

YEAR	MILL CONSUMPTION OF 4 FIBERS										DOMESTIC CONSUMPTION OF 3 FIBERS (CONS)=MILL CONSUMPTION+IMPORTS (IMP) LESS EXPORTS (EXP) OF SEMIMANUFACTURED & MANUFACTURED PRODUCTS											
	MANUFACTURED FIBER		COTTON		WOOL		SILK		TOTAL		MANUFAC. FIBER			COTTON			WOOL			TOTAL		
	LB	%	LB	%	LB	%	LB	%	LB	%	IMP	EXP	CONS	IMP	EXP	CONS	IMP	EXP	CONS	IMP	EXP	CONS
	(23)		(24)		(25)		(26)		(27)		(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
1975	6883.0	*68.3*	3068.7	*30.4*	132.0	*1.3*	1.0	--	10084.7	*100.0*	400.4	322.4	6961.0	501.3	353.7	3216.3	48.6	19.2	161.4	950.3	695.3	10339.7
1976	7374.9	*67.6*	3389.0	*31.1*	145.9	*1.3*	2.8	--	10912.6	*100.0*	479.5	352.2	7502.2	708.6	413.2	3684.4	66.7	13.9	198.7	1254.8	779.3	11388.1
1977	8096.2	*71.0*	3169.8	*27.8*	133.9	*1.2*	1.6	--	11401.5	*100.0*	530.7	367.7	8259.2	669.4	369.5	3469.7	85.9	11.5	208.3	1286.0	748.7	11938.8
1978	8341.0	*72.4*	3040.4	*26.4*	141.6	*1.2*	2.0	--	11525.0	*100.0*	642.6	441.7	8541.9	845.4	355.7	3530.1	92.2	11.6	222.2	1580.2	809.0	12296.2
1979	8523.4	*72.7*	3066.4	*26.2*	134.4	*1.1*	1.5	--	11725.7	*100.0*	525.0	596.6	8451.8	746.1	478.0	3334.5	80.6	14.0	201.0	1351.7	1088.6	11988.8
1980	7885.7	*71.2*	3064.4	*27.6*	137.8	*1.2*	1.0	--	11088.9	*100.0*	540.6	771.5	7654.8	810.9	523.1	3352.2	85.1	23.8	199.1	1436.6	1318.4	11207.1
1981	7721.5	*72.9*	2730.8	*25.7*	152.7	*1.4*	2.0	--	10607.0	*100.0*	639.1	637.7	7722.9	961.9	367.3	3325.4	93.1	11.8	234.0	1694.1	1016.8	11284.3
1982	6653.5	*71.8*	2478.9	*26.8*	129.5	*1.4*	2.0	--	9263.9	*100.0*	697.9	438.5	6912.9	897.2	253.4	3122.7	100.1	10.8	218.8	1695.2	702.7	10256.4
1983	7994.5	*73.0*	2795.7	*25.5*	162.5	*1.5*	1.6	--	10954.3	*100.0*	1069.5	460.7	8603.3	1135.5	219.6	3711.6	149.8	11.6	300.7	2354.8	691.9	12617.2
1984	7789.5	*73.4*	2668.2	*25.1*	163.2	*1.5*	1.4	--	10622.3	*100.0*	1342.6	487.9	8644.2	1465.6	206.1	3927.7	210.2	12.0	361.4	3018.4	706.0	12934.7
1985	8035.5	*73.3*	2796.0	*25.5*	134.7	*1.2*	1.5	--	10967.7	*100.0*	1491.0	499.1	9027.4	1629.2	213.2	4212.0	264.8	17.3	381.7	3385.0	730.1	13622.6
1986	8453.9	*70.9*	3301.7	*27.7*	164.5	*1.4*	1.0	--	11921.1	*100.0*	1703.0	519.3	9637.6	1910.5	274.8	4937.4	275.6	16.0	424.1	3889.1	810.1	15000.1
1987	8861.7	*69.4*	3736.5	*29.3*	167.6	*1.3*	1.0	--	12766.8	*100.0*	1805.4	591.9	10075.2	2335.7	298.0	5774.2	258.3	21.3	404.6	4399.4	911.2	16255.0
1988	9017.4	*71.4*	3470.1	*27.4*	156.1	*1.2*	1.0	--	12644.6	*100.0*	1735.7	684.6	10068.5	2118.8	330.2	5258.7	242.4	30.6	367.9	4096.9	1045.4	15696.1
1989	8976.4	*68.7*	3937.1	*30.1*	153.9	*1.2*	1.0	--	13068.4	*100.0*	*1820.0	*740.0	*10056.4	*2440.0	*360.0	*6017.1	*215.0	*33.0	*335.9	*4475.0	*1133.0	*16410.4

NOTE Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the March 1985 issue.
This table, expanded to include the New MFA Fibers, will be reproduced in a forthcoming issue.

* **Preliminary estimates derived from Department of Commerce data.**

SOURCES OF DATA, ARRANGED BY COLUMN NUMBER ( ):

1 & 4: This issue on page 56
12 & 15: This issue on page 57
7 & 18: This issue on page 60
2: For 1975 - 1988: Import Classes 309.0310, .0610, .2000, 310.0106, .0130, .0206, .0230 & .0610.
For 1989: Import Classes 5403.10.30.20, 5403.10.30.40, 5403.10.60.00, 5403.20.30.00, 5403.20.60.00, 5403.31.00.20 - 5403.39.00.40, 5403.41.10.00 - 5403.49.00.00, 5405.00.30.00 & 5405.00.60.00
5: For 1975 - 1988: Import Classes 309.3010, .3310, .4320 & .4325
For 1989: Import Classes 5504.10.00.00, 5504.90.00.00, 5502.00.00.00 & 5507.00.00.00
8: For 1975 - 1988: Import Classes 309.6615 & .7510.
For 1989: Import Class 5505.20.00.00.
9: For 1975 - 1988: Export Class 309.7400
For 1989: Export Class 5505.20.00.00.
13: For 1975 - 1988: Import Classes 309.0200, .0330, .0340, .0365, .0500, .0630, .0640, .0665, .2100, .2500, 310.0107, .0108, .0110, .0114, .0149, .0150, .0170, .0207, .0208, .0210, .0214, .0249, .0250, .0270, .0550, .0630 & .0650
For 1989: Import Classes 5402.10.30.20, 5402.10.30.40, 5402.10.60.00, 5402.31.30.00, 5402.31.60.00, 5402.32.30.00, 5402.32.60.00, 5402.41.00.20, 5402.41.00.40, 5402.51.00.00, 5402.61.00.00, 5404.10.20.20, 5402.20.30.20, 5402.20.30.40, 5402.20.60.00, 5402.33.30.00, 5402.33.60.00, 5402.42.00.00, 5402.43.00.20, 5402.43.00.40, 5402.52.00.00, 5402.62.00.00, 5404.10.20.40, 5402.39.30.00, 5402.39.30.10, 5402.39.30.90, 5402.39.60.00, 5402.39.60.10, 5402.39.60.90, 5402.49.00.10, 5402.49.00.30, 5402.49.00.60, 5402.49.00.80, 5402.59.00.00, 5402.69.00.00, 5404.10.10.00, 5404.10.20.90 & 5404.90.00.00
16: For 1975 - 1988: Import Classes 309.3030, .3040, .3050, .3065, .3200, .3340, .3350, .3365, .4331, .4336, .4341, .4351, .4361, .4366, .4371 & .4390.
For 1989: Import Classes 5503.10.00.00, 5503.20.00.00, 5503.30.00.00, 5503.40.00.00, 5503.90.00.00, 5501.10.00.00, 5501.20.00.00, 5501.30.00.00, 5501.90.00.00, 5506.10.00.00, 5506.20.00.00, 5506.30.00.00 & 5506.90.00.00
19: For 1975 - 1988: Import Classes 309.6625, .6630, .6645, .6660, .7000 & .7525 - .7555
For 1989: Import Classes 5505.10.00.20, 5505.10.00.40 & 5505.10.00.60
20: For 1975 - 1988: Export Classes 309.7620, .7630, .7640 & .7660
For 1989: Export Classes 5505.10.00.20, 5505.10.00.40 & 5505.10.00.60
24: U.S. Census Bureau Report M22P
25: U.S. Census Bureau Report M22D
26: For 1975 - 1988: Import Classes 308.0200 - .2000
28, 29, 31, 32, 34 & 35: ***Cotton and Wool Outlook & Situation,*** U.S. Department of Agriculture

CERTAIN TOTALS IN THE TABLES:
(Obvious totals such as Columns 1+2=3, 4+5=6, etc. are not described here.)
10: Columns 7+8-9
21: Columns 18+19-20
23: Columns 11+22
30: Columns 23+28-29
33: Columns 24+31-32
36: Columns 25+34-35

TABLE 10:
PRODUCERS' WASTE SHIPMENTS
MILLION POUNDS

YEAR	RAYON	SYNTHETIC (NONCELL.)
1964	49.0	45.9
1965	51.5	55.2
1966	44.6	66.5
1967	36.1	92.8
1968	44.3	122.3
1969	39.4	140.3
1970	34.5	136.3
1971	36.3	157.8
1972	38.5	202.7
1973	36.8	274.8
1974	29.9	246.4
1975	13.2	228.7
1976	14.7	262.3
1977	18.5	291.0
1978	15.7	263.9
1979	17.2	238.6
1980	13.5	170.2
1981	15.3	174.2
1982	10.7	173.2
1983	9.4	214.1
1984	11.4	216.9
1985	8.8	260.2
1986	10.4	261.5
1987	9.6	239.1
1988	7.8	244.8
1989	6.0	188.5

TABLE 11:
RAW COTTON CONSUMPTION

BALES [a]

MONTH	1981	1982	1983	1984	1985	1986	1987	1988	1989
JANUARY	485	378	404	469	389	595	546	568	554
FEBRUARY	446	398	430	447	405	499	562	590	572
MARCH	539	492	549	547	504	492	734	738	734
APRIL	433	409	431	430	406	620	573	556	611
MAY	441	392	441	442	426	503	586	551	631
JUNE	531	460	543	501	521	489	708	662	781
JULY	385	317	369	354	366	522	518	433	545
AUGUST	429	386	453	415	458	534	614	563	680
SEPTEMBER	517	474	560	494	562	523	753	676	828
OCTOBER	448	416	459	415	493	683	621	538	664
NOVEMBER	403	390	446	382	477	529	606	509	617
DECEMBER	400	425	468	408	480	568	610	554	653
TOTAL	5407	4937	5553	5304	5487	6557	7431	6938	7870

SOURCE: U.S. Department of Commerce, Bureau of the Census Report M22P.

a. Running Bales of 500 lbs. net.

TABLE 12:
RAW SILK DELIVERIES

BALES [a]

MONTH	1981	1982	1983	1984	1985	1986	1987	1988	1989
JANUARY	471	450	280	715	462	410	411	292	358
FEBRUARY	380	489	506	537	689	504	680	430	234
MARCH	471	662	390	455	344	197	572	559	471
APRIL	446	398	462	315	480	244	526	317	329
MAY	322	234	717	636	415	225	245	302	405
JUNE	529	369	377	655	NA	227	447	189	564
JULY	300	495	264	229	NA	555	253	203	353
AUGUST	259	403	474	672	NA	NA	327	613	401
SEPTEMBER	348	364	534	532	NA	NA	330	310	288
OCTOBER	414	226	529	562	NA	NA	470	126	317
NOVEMBER	487	514	587	391	NA	NA	239	367	475
DECEMBER	611	317	324	538	NA	NA	448	108	442
TOTAL	5038	4921	5444	6237	4813	4272	4948	3816	4637

SOURCE: International Silk Association.
NA Monthly data not available.

a. Average Bale weight 132 lbs.

TABLE 13:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

	1990												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242												242	114
TEXTURED	54												54	180
OTHER	1385												1385	1767
MONOFILAMENTS & STRIPS	150												150	96
SUBTOTAL ABOVE	**1831**												**1831**	**2157**
STAPLE	5989												5989	5924
TOW	312												312	47
TOPS	3												3	6
SUBTOTAL ABOVE	**6304**												**6304**	**5977**
WASTE	**0**												**0**	**18**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435												1435	1037
TEXTURED														
UP TO 450 DENIER	270												270	385
OVER 450 DENIER	2936												2936	1311
OTHER	4531												4531	3820
MONOFILAMENTS & STRIPS	216												216	72
SUBTOTAL ABOVE	**9388**												**9388**	**6625**
POLYESTER														
HIGH TENACITY	614												614	957
TEXTURED	785												785	883
POY	719												719	0
OTHER	2038												2038	1152
MONOFILAMENTS & STRIPS	53												53	65
SUBTOTAL ABOVE	**4209**												**4209**	**3057**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451												1451	2057
OTHER	277												277	261
MONOFILAMENTS & STRIPS	611												611	147
SUBTOTAL ABOVE	**2339**												**2339**	**2465**
STAPLE														
NYLON	4048												4048	1726
POLYESTER	9261												9261	5584
ACRYLIC	1711												1711	1934
POLYPROPYLENE	543												543	44
OTHER	196												196	172
TOW														
NYLON	409												409	237
POLYESTER	15												15	47
ACRYLIC	2512												2512	2023
OTHER	70												70	117
TOPS	102												102	488
SUBTOTAL ABOVE	**18867**												**18867**	**12372**
WASTE														
NYLON	2694												2694	1971
POLYESTER	2703												2703	999
OTHER	444												444	396
TOTAL MANUFACTURED FIBERS ABOVE	**48779**												**48779**	**36037**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115												115	229
SPUN YARN	427												427	492
SPUN YARNS														
SYNTHETIC	2420												2420	4960
ARTIFICIAL	0												0	0
PUT UP FOR RETAIL SALE	32												32	71
GRAND TOTAL ABOVE	**51773**												**51773**	**41789**

SOURCE: U.S. Census Bureau Report IM145X.

TABLE 14:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92												92	9
TEXTURED	217												217	463
OTHER	101												101	694
MONOFILAMENTS & STRIPS	97												97	90
SUBTOTAL ABOVE	**507**												**507**	**1256**
STAPLE	1195												1195	2827
TOPS	333												333	94
SUBTOTAL ABOVE	**1528**												**1528**	**2921**
WASTE	330												330	1303
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757												7757	9331
TEXTURED														
UP TO 450 DENIER	1571												1571	522
OVER 450 DENIER	5636												5636	4706
OTHER	2637												2637	2038
MONOFILAMENTS & STRIPS	8												8	239
SUBTOTAL ABOVE	**17609**												**17609**	**16836**
POLYESTER														
HIGH TENACITY	4308												4308	3031
TEXTURED	3074												3074	3651
POY	1831												1831	939
OTHER	1297												1297	1007
MONOFILAMENTS & STRIPS	185												185	208
SUBTOTAL ABOVE	**10695**												**10695**	**8836**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535												535	1033
OTHER	2035												2035	1342
MONOFILAMENTS & STRIPS	876												876	486
SUBTOTAL ABOVE	**3446**												**3446**	**2861**
STAPLE														
NYLON	3163												3163	2605
POLYESTER	7157												7157	14048
ACRYLIC	4584												4584	3326
POLYPROPYLENE	2038												2038	1336
OTHER	2688												2688	836
TOW														
NYLON	121												121	31
POLYESTER	18												18	37
ACRYLIC	1710												1710	1037
OTHER	26												26	161
TOPS	3984												3984	847
SUBTOTAL ABOVE	**25489**												**25489**	**24264**
WASTE														
NYLON	4117												4117	2127
POLYESTER	3268												3268	4369
OTHER	3343												3343	5113
TOTAL MANUFACTURED FIBERS ABOVE	**70332**												**70332**	**69886**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	2769												2769	13
SPUN YARN	235												235	0
SPUN YARNS														
SYNTHETIC	3007												3007	2886
ARTIFICIAL	0												0	0
PUT UP FOR RETAIL SALE	287												287	606
GRAND TOTAL ABOVE	**76630**												**76630**	**73391**

SOURCE: U.S. Census Bureau Report EM522

TABLE 15:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67												67	0
BRAZIL	26												26	53
CANADA	628												628	745
CHILE	0												0	44
GERMANY, FED. REP. OF	422												422	794
IRELAND	145												145	37
JAPAN	104												104	56
KOREA, REP. OF	0												0	66
MEXICO	102												102	156
NETHERLANDS	282												282	61
UNITED KINGDOM	34												34	99
ALL OTHER COUNTRIES [a]	21												21	46
TOTAL ARTIFICIAL YARN	**1831**												**1831**	**2157**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319												319	323
CANADA	4973												4973	4757
CHINA, PRC	0												0	104
GERMANY, DEM. REP.	0												0	0
GERMANY, FED. REP. OF	89												89	68
JAPAN	143												143	150
SWITZERLAND	0												0	9
TAIWAN	354												354	28
UNITED KINGDOM	89												89	265
ALL OTHER COUNTRIES [b]	337												337	273
TOTAL ARTIFICIAL STAPLE+TOW	**6304**												**6304**	**5977**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0												0	0
BELGIUM	776												776	0
BRAZIL	70												70	106
CANADA	3834												3834	3437
COSTA RICA	762												762	252
ECUADOR	53												53	91
FRANCE	2007												2007	1180
GERMANY, FED. REP. OF	2096												2096	2231
ISRAEL	0												0	299
ITALY	892												892	924
JAPAN	760												760	469
KOREA, REP. OF	31												31	10
MEXICO	1393												1393	1447
NETHERLANDS	103												103	68
SINGAPORE	16												16	0
TAIWAN	791												791	50
THAILAND	58												58	65
UNITED KINGDOM	1881												1881	1482
ALL OTHER COUNTRIES [c]	413												413	36
TOTAL SYNTHETIC YARN	**15936**												**15936**	**12147**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0												0	0
AUSTRALIA	38												38	31
BELGIUM	1												1	47
CANADA	3703												3703	1413
FRANCE	592												592	230
GERMANY, FED. REP. OF	1017												1017	1985
INDIA	1731												1731	0
IRELAND	0												0	280
ITALY	422												422	482
JAPAN	1754												1754	1773
KOREA, REP. OF	1786												1786	2297
MEXICO	3590												3590	1049
NETHERLANDS	1												1	31
SPAIN	35												35	8
SWITZERLAND	399												399	146
TAIWAN	888												888	262
TURKEY	112												112	18
UNITED KINGDOM	2249												2249	2318
ALL OTHER COUNTRIES [d]	549												549	2
TOTAL SYNTHETIC STAPLE+TOW	**18867**												**18867**	**12372**

a. Italy 11, France 4, Taiwan 2, Uruguay 2, Hong Kong 1, Thailand 1.

b. Poland 124, Sweden 118, Thailand 47, France 26, Netherlands 19, Italy 2, France 1

c. Spain 114, Paraguay 83, Portugal 62, Ireland 39, Hong Kong 31, Finland 21, Turkey 17, Morocco 12, Sweden 10, Switzerland 9, Yugoslavia 8, Austria 4, Haiti 3.

d. Venezuela 395, Thailand 110, Malaysia 44

TABLE 16:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

	1989 REVISED												YEAR TO DATE[a]	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	17.3	17.1	18.4	21.5	18.3	18.4	18.9	17.8	17.3	19.9	14.8	19.3	219.0	216.7
RAYON STAPLE	34.5	32.1	36.5	31.4	34.8	30.9	24.8	29.4	26.7	26.8	24.7	21.8	354.4	406.5
TOTAL ARTIFICIAL (CELLULOSIC)	**51.8**	**49.2**	**54.9**	**52.9**	**53.1**	**49.3**	**43.7**	**47.2**	**44.0**	**46.7**	**39.5**	**41.1**	**573.4**	**623.2**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	31.3	30.5	32.6	32.3	28.9	32.7	29.1	29.2	28.6	28.8	28.7	31.8	364.5	375.2
- CARPET	74.9	77.2	82.0	77.5	86.1	78.5	73.4	89.9	88.7	79.5	78.7	81.3	967.7	976.2
- TEXTILE[f]	33.9	33.2	35.0	34.6	33.8	34.2	31.8	32.3	32.7	33.0	32.7	32.7	399.9	387.0
POLYESTER - INDUSTRIAL[d]	28.6	29.7	30.9	32.2	30.4	32.8	29.8	32.5	29.2	30.3	26.4	32.5	365.3	360.2
- TEXTILE[f]	73.2	71.2	74.4	78.2	77.0	66.1	72.5	54.9	58.5	62.5	55.7	59.8	804.0	871.9
OLEFIN[e]	105.3	104.3	103.6	104.1	112.3	105.5	94.8	107.0	107.0	107.2	103.3	94.1	1248.5	1219.6
TOTAL YARN	**347.2**	**346.1**	**358.5**	**358.9**	**368.5**	**349.8**	**331.4**	**345.8**	**344.7**	**341.3**	**325.5**	**332.2**	**4149.9**	**4190.1**
STAPLE+TOW+FIBERFILL														
NYLON	82.3	78.4	88.8	76.4	81.3	78.3	74.9	90.8	85.5	85.9	81.9	74.0	978.5	963.9
ACRYLIC+MODACRYLIC	41.7	46.2	48.6	49.2	51.7	44.0	41.1	47.6	44.1	44.0	42.1	37.1	537.4	590.2
POLYESTER	205.8	192.1	212.4	214.3	208.1	193.9	182.3	198.8	182.0	200.9	182.9	181.3	2354.8	2448.9
OLEFIN	31.1	31.6	32.0	31.4	32.3	33.5	27.8	33.9	33.1	33.3	29.1	28.3	377.4	363.8
TOTAL STAPLE	**360.9**	**348.3**	**381.8**	**371.3**	**373.4**	**349.7**	**326.1**	**371.1**	**344.7**	**364.1**	**336.0**	**320.7**	**4248.1**	**4366.8**
TOTAL SYNTHETIC (NONCELLULOSIC)	**708.1**	**694.4**	**740.3**	**730.2**	**741.9**	**699.5**	**657.5**	**716.9**	**689.4**	**705.4**	**661.5**	**652.9**	**8398.0**	**8556.9**
TOTAL MANUFACTURED FIBER	**759.9**	**743.6**	**795.2**	**783.1**	**795.0**	**748.8**	**701.2**	**764.1**	**733.4**	**752.1**	**701.0**	**694.0**	**8971.4**	**9180.1**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	11.7	10.9	11.3	10.4	9.7	8.9	11.0	10.7	11.6	10.2	8.9	9.9	9.9	11.4
RAYON STAPLE	13.0	13.2	11.7	12.5	13.4	15.8	16.8	16.3	18.1	18.0	19.2	22.4	22.4	14.0
TOTAL ARTIFICIAL (CELLULOSIC)	**24.7**	**24.1**	**23.0**	**22.9**	**23.1**	**24.7**	**27.8**	**27.0**	**29.7**	**28.2**	**28.1**	**32.3**	**32.3**	**25.4**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.4	24.8	22.4	22.9	24.2	24.5	26.7	27.3	28.7	30.4	25.8	31.1	31.1	22.3
- CARPET	63.5	63.2	62.8	68.7	64.0	66.8	73.6	59.3	54.6	51.5	56.6	63.8	63.8	57.3
- TEXTILE[f]	47.1	48.3	46.4	47.0	47.4	49.2	52.7	54.1	56.3	55.3	53.6	57.5	57.5	45.7
POLYESTER - INDUSTRIAL[d]	35.0	31.4	30.6	31.6	30.9	31.9	33.9	32.3	33.2	33.9	35.6	36.8	36.8	35.0
- TEXTILE[f]	73.5	76.9	81.8	85.1	85.0	89.1	99.7	115.7	116.8	117.7	120.5	108.9	108.9	70.9
OLEFIN[e]	53.1	53.8	58.0	57.8	58.5	60.7	61.1	60.6	62.3	62.6	65.3	66.1	66.1	57.4
TOTAL YARN	**296.6**	**298.4**	**302.0**	**313.1**	**310.0**	**322.2**	**347.7**	**349.3**	**351.9**	**351.4**	**357.4**	**364.2**	**364.2**	**288.6**
STAPLE+TOW+FIBERFILL														
NYLON	51.8	52.9	51.0	57.5	57.5	57.0	59.1	46.9	46.8	48.8	50.5	49.8	49.8	47.5
ACRYLIC+MODACRYLIC	70.5	68.3	69.0	67.3	65.2	69.7	71.7	69.3	66.3	67.2	64.0	66.5	66.5	61.2
POLYESTER	163.5	163.8	158.5	164.4	176.2	191.0	226.5	233.6	218.9	219.7	204.4	189.9	189.9	159.4
OLEFIN	31.0	31.3	32.8	34.3	35.2	33.3	34.2	34.1	30.5	33.2	34.2	34.6	34.6	30.3
TOTAL STAPLE	**316.8**	**316.3**	**311.3**	**323.5**	**334.1**	**351.0**	**391.5**	**383.9**	**362.5**	**368.9**	**353.1**	**340.8**	**340.8**	**298.4**
TOTAL SYNTHETIC (NONCELLULOSIC)	**613.4**	**614.7**	**613.3**	**636.6**	**644.1**	**673.2**	**739.2**	**733.2**	**714.4**	**720.3**	**710.5**	**705.0**	**705.0**	**587.0**
TOTAL MANUFACTURED FIBER	**638.1**	**638.8**	**636.3**	**659.5**	**667.2**	**697.9**	**767.0**	**760.2**	**744.1**	**748.5**	**738.6**	**737.3**	**737.3**	**612.4**
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL	12.1	12.8	14.1	11.5	11.5	12.3	10.6	10.9	11.7	9.9	9.9	10.7	138.0	140.7
CARPET CLASS WOOL	0.8	1.4	1.5	1.6	1.6	1.3	1.2	1.5	1.7	1.3	1.0	1.0	15.9	15.4
TOTAL RAW WOOL	**12.9**	**14.2**	**15.6**	**13.1**	**13.1**	**13.6**	**11.8**	**12.4**	**13.4**	**11.2**	**10.9**	**11.7**	**153.9**	**156.1**
RAW COTTON	289.5	301.0	339.2	305.7	362.3	343.5	286.8	341.0	400.7	332.7	324.0	310.7	3937.1	3470.1

a. "Year to date" totals for stock, are the latest month's figures.

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

TABLE 17:
FILAMENT YARN DOMESTIC SHIPMENTS[a]

MILLION POUNDS

ITEM		ANNUAL DATA				QUARTERLY DATA							
						1988				1989			
		1986	1987	1988	1989	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
(C) CELLULOSIC YARN		*(N) NYLON*				*(P) POLYESTER*				*(O) OLEFIN*			
HOSIERY[b]	N	95.1	93.2	100.3	j	23.1	24.9	23.9	28.4	j	j	j	j
OTHER CIRCULAR KNIT[c]	N	21.3	25.3	26.4	139.1	7.1	6.4	6.7	6.2	32.5	33.8	34.8	38.0
	P	150.3	102.8	119.5	130.0	25.6	28.2	27.9	37.8	40.4	32.8	30.2	26.6
	C	2.0	1.1	0.6	0.5	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1
FLAT KNIT	C	47.8	27.9	24.3	21.4	5.7	7.7	5.8	5.1	6.1	7.5	3.7	4.1
	N	133.8	131.4	133.4	125.2	31.2	33.1	33.2	35.9	36.0	34.4	29.8	25.0
	P	167.1	162.5	162.1	181.0	39.2	43.0	38.6	41.3	46.0	47.7	44.5	42.8
CARPET FACE	N	881.4	916.0	38.3	932.3	228.2	233.8	241.2	235.1	225.0	233.8	243.7	229.8
	O	215.7	244.5	266.6	249.9	65.1	67.9	67.2	66.4	69.0	63.3	60.2	57.4
CARPET BACKING[d]	O	404.1	425.3	427.0	463.4	107.9	113.0	102.1	104.0	105.4	123.4	120.6	114.0
OTHER BROAD WOVEN[e]	C	126.3	122.8	141.9	149.4	31.0	35.2	36.0	39.7	35.6	38.5	37.8	37.5
	N	76.2	79.4	78.3	88.8	20.3	17.6	19.8	20.6	21.1	22.6	21.9	23.2
	P	344.4	379.4	391.3	368.7	89.8	95.5	94.0	112.0	100.7	106.8	81.6	79.6
	O	271.5	317.7	337.3	337.5	85.0	84.0	82.5	85.8	88.8	84.3	83.6	80.8
NARROW WOVEN[f]	C	2.0	2.2	4.4	4.4	1.5	1.1	0.9	0.9	1.7	0.8	1.0	0.9
	N	33.9	42.1	42.0	36.9	11.1	11.1	9.9	9.9	9.5	10.2	8.4	8.8
	P	44.0	66.2	81.0	76.4	15.2	18.9	17.8	29.1	18.8	23.2	20.0	14.4
	O	17.5	17.7	19.0	19.8	4.7	4.8	4.8	4.7	4.8	4.7	5.2	5.1
TIRES, INCL. CHAFER[g]	N	134.2	143.0	132.2	135.7	34.5	33.1	31.2	33.4	34.3	33.6	32.6	35.2
	P	159.3	162.8	171.8	169.3	41.3	44.2	43.4	42.9	41.7	43.6	42.3	41.7
OTHER RUBBER INDUSTRY[c g]	N	15.2	16.4	20.4	18.1	5.5	4.7	4.9	5.3	4.5	4.4	5.0	4.2
	P	27.2	34.5	25.2	32.7	6.7	6.2	6.2	6.1	6.3	8.2	8.9	9.3
ROPE, CORDAGE & FISHLINE	N	36.4	37.9	36.4	34.2	9.7	9.7	8.2	8.8	8.8	9.2	7.9	8.3
	P	13.0	13.4	12.5	14.4	3.7	3.1	2.4	3.3	3.2	3.8	3.5	3.9
	O	106.3	106.7	120.3	125.6	33.3	30.5	24.5	32.0	33.5	30.4	24.9	36.8
ALL OTHER[h]	C	14.0	12.8	11.4	11.6	3.0	3.1	3.0	2.3	2.4	3.4	3.0	2.8
	N	52.1	69.6	64.7	65.0	17.1	21.0	12.1	14.5	16.2	17.7	16.8	14.3
	P	187.1	191.8	194.0	138.2	45.2	52.8	47.9	48.1	34.9	37.5	33.1	32.7
	O	34.1	23.6	29.6	29.8	7.5	7.5	7.7	6.9	6.5	9.4	7.1	6.8
TOTAL ABOVE	**C**	**192.1**	**166.8**	**182.6**	**187.3**	**41.4**	**47.3**	**45.8**	**48.1**	**46.0**	**50.3**	**45.6**	**45.4**
	N	**1479.6**	**1554.3**	**1572.4**	**1575.3**	**387.8**	**395.4**	**391.1**	**398.1**	**387.9**	**399.7**	**400.9**	**386.8**
	P	**1092.4**	**1113.4**	**1157.4**	**1110.7**	**266.7**	**291.9**	**278.2**	**320.6**	**292.0**	**303.6**	**264.1**	**251.0**
	O	**1049.2**	**1135.5**	**1199.8**	**1226.0**	**303.5**	**307.7**	**288.8**	**299.8**	**308.0**	**315.5**	**301.6**	**300.9**
TOTAL DOMESTIC		**3813.3**	**3970.0**	**4112.2**	**4099.3**	**999.4**	**1042.3**	**1003.9**	**1066.6**	**1033.9**	**1069.1**	**1012.2**	**984.1**
ALSO DIVIDED AS													
APPAREL		*962.4*	*930.2*	*941.2*	*924.7*	*223.0*	*237.0*	*226.0*	*255.2*	*253.4*	*253.3*	*217.1*	*200.9*
HOME FURNISHINGS		*1738.0*	*1838.4*	*1902.6*	*1927.2*	*463.0*	*485.0*	*475.1*	*479.5*	*468.6*	*498.1*	*489.9*	*470.6*
INDUSTRIAL		*1112.9*	*1201.4*	*1268.4*	*1247.4*	*313.4*	*320.3*	*302.8*	*331.9*	*311.9*	*317.7*	*305.2*	*312.6*
SHIPMENTS OF FEED & PRODUCER-TEXTURED YARN (NONCARPET)[i]													
NYLON		115.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYESTER		634.6	626.3	649.9	597.3	146.7	159.2	153.8	190.2	164.5	164.0	138.7	130.1
OLEFIN		22.9	26.6	24.4	26.0	6.4	6.4	5.5	6.1	6.9	4.5	8.0	6.6

NA No longer available.

a. Filament yarn plus monofilament shipments by primary trade or end use; olefin includes spunbonded polypropylene but does not include spunbonded polyethylene.

b. Small quantities of polyester and cellulosic yarn are included in All Other.

c. Small quantities of olefin are included in All Other.

d. Small quantities of nylon and polyester are included in All Other.

e. Other Broad Woven except carpets, tire fabric, flat belting, etc.

f. Narrow Woven includes apparel ribbons and braids, auto seat belts and/or furniture webbing.

g. Cellulosic yarn quantities included in All Other.

h. All Other includes sewing thread and other industrial applications. The olefin quantities include sliver knit backing. Also includes indirect exports.

i. These quantities are included in the Total Domestic area above.

j. Nylon quantities are included in Other Circular Knit.

TABLE 18:
STAPLE+TOW DOMESTIC SHIPMENTS

MILLION POUNDS

ITEM		ANNUAL DATA				QUARTERLY DATA							
						1988				1989			
		1986	1987	1988	1989	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
(R) RAYON [h] (N) NYLON (A) ACRYLIC+MODACRYLIC (P) POLYESTER (O) OLEFIN													
HOSIERY, SWEATERS & CRAFT YARNS[a]	A	228.8	192.4	183.2	174.5	47.5	46.7	46.4	42.6	48.4	47.3	41.5	37.3
	NPR	5.0	3.5	2.7	2.1	0.8	0.7	0.6	0.6	0.6	0.4	0.5	0.6
PILE FABRICS[b]	A	23.2	20.8	21.3	20.0	5.0	5.7	5.6	5.0	5.1	6.0	5.0	3.9
	P	15.0	19.7	14.7	15.3	3.9	3.6	3.3	3.9	3.7	4.0	4.1	3.5
OTHER CIRCULAR KNIT + FLAT KNIT[c]	R	4.7	3.7	2.5	NA	0.5	0.3	0.8	0.9	NA	NA	NA	NA
	A	196.3	185.1	139.0	132.4	37.8	39.6	34.2	27.4	35.7	34.9	36.4	25.4
	P	367.8	453.3	470.0	519.5	108.4	112.6	108.5	140.5	127.8	131.4	132.0	128.3
BLANKETS[b]	A	26.7	25.7	25.1	29.8	6.4	5.6	7.9	5.2	7.4	9.3	8.0	5.1
	P	3.7	9.2	6.9	9.2	1.8	1.4	1.6	2.1	2.3	2.9	2.4	1.6
OTHER BROAD WOVEN	R	218.0	230.7	243.0	NA	58.7	60.5	63.5	60.3	NA	NA	NA	NA
	N	37.0	38.7	35.2	32.7	8.7	8.0	8.4	10.1	8.1	7.8	8.7	8.1
	A	35.3	41.7	39.3	40.5	10.4	9.6	8.9	10.4	12.6	11.5	7.9	8.5
	P	885.6	839.2	863.5	821.8	210.7	212.9	205.7	234.2	200.8	226.4	197.6	197.0
	O	18.0	20.2	17.1	33.4	4.6	3.8	3.4	5.3	5.2	9.0	9.1	10.1
CARPET FACE YARNS[f]	R	0.4	+	0.4	NA	0.2	0.1	0	0.1	NA	NA	NA	NA
	N	837.8	905.1	887.7	894.9	225.8	210.5	228.0	223.4	226.3	217.3	230.3	221.0
	P	145.0	209.0	261.2	211.6	66.1	69.0	62.3	63.8	60.1	51.3	48.6	51.6
	O	117.2	116.2	138.2	137.7	30.3	35.4	34.2	38.3	38.5	35.1	32.9	31.2
FIBERFILL[d]	P	294.9	348.6	357.2	349.5	85.3	84.9	92.9	94.1	90.4	93.6	79.2	86.3
FLOCK	NP	5.9	5.5	6.9	7.5	1.6	1.6	1.6	2.1	1.8	1.7	1.7	2.3
	R	1.8	0.9	0.1	NA	+	+	+	0.1	NA	NA	NA	NA
NONWOVENS[e]	R	125.4	124.4	122.3	NA	35.4	36.0	26.7	24.2	NA	NA	NA	NA
	N	2.1	1.9	2.1	2.4	0.4	0.5	0.6	0.6	0.7	0.6	0.6	0.5
	P	175.4	204.2	244.1	271.5	59.7	55.9	59.0	69.5	68.0	71.7	65.8	66.0
	[g] VINYON+O	166.2	198.0	180.9	183.0	46.0	46.9	45.4	42.6	46.1	46.7	46.8	43.4
ALL OTHER	R	20.8	22.7	17.2	NA	6.9	5.0	2.9	2.4	NA	NA	NA	NA
	N	11.9	14.8	13.7	17.8	3.2	3.5	3.1	3.9	5.3	3.8	4.3	4.4
	A	20.9	13.6	13.2	17.4	1.9	2.1	4.3	4.9	3.7	3.4	4.0	6.3
	P	108.3	115.0	91.3	61.0	21.5	31.4	17.3	21.1	21.5	12.9	13.0	13.6
	[g]VINYON+O	11.3	6.7	8.0	9.3	2.9	1.5	1.8	1.8	1.8	2.7	2.6	2.2
TOTAL ABOVE	**R**	**373.0**	**383.1**	**386.0**	**NA**	**101.9**	**102.0**	**94.0**	**88.1**	**NA**	**NA**	**NA**	**NA**
	N	**894.9**	**966.0**	**944.9**	**955.3**	**239.4**	**223.9**	**241.6**	**240.0**	**242.0**	**231.2**	**245.8**	**236.3**
	A	**531.2**	**479.3**	**421.1**	**414.8**	**109.0**	**109.3**	**107.3**	**95.5**	**112.9**	**112.4**	**102.8**	**86.7**
	P	**1998.6**	**2201.0**	**2311.8**	**2261.3**	**558.3**	**572.5**	**551.2**	**629.8**	**575.4**	**594.6**	**543.0**	**548.3**
	[g] VINYON+O	**312.7**	**341.1**	**344.2**	**363.4**	**83.8**	**87.6**	**84.8**	**88.0**	**91.6**	**93.5**	**91.4**	**86.9**
TOTAL DOMESTIC		**4110.4**	**4370.5**	**4408.0**	**3994.8**	**1092.4**	**1095.3**	**1078.9**	**1141.4**	**1021.9**	**1031.7**	**983.0**	**958.2**
ALSO DIVIDED AS													
APPAREL		*1489.3*	*1479.9*	*1421.6*	*1266.8*	*352.6*	*356.4*	*340.5*	*372.1*	*323.3*	*347.1*	*313.4*	*283.0*
HOME FURNISHINGS		*1625.8*	*1755.8*	*1827.5*	*1695.7*	*451.5*	*445.9*	*455.5*	*474.6*	*439.0*	*418.4*	*421.2*	*417.1*
INDUSTRIAL		*995.3*	*1134.8*	*1158.9*	*1032.3*	*288.3*	*293.0*	*282.9*	*294.7*	*259.6*	*266.2*	*248.4*	*258.1*

NA No longer available.

a. Olefin quantities are included in All Other.

b. Rayon and nylon quantities are included in All Other.

c. Nylon quantities are included in All Other.

d. Rayon, acrylic and nylon quantities are included in All Other.

e. Wet & dry laid and needled batts only.

f. Acrylic and nylon quantities are included in All Other.

g. 1987-1989 data exclude Vinyon.

h. Rayon staple+tow data no longer available in 1989.

TABLE 19:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

ITEM	1990												YEAR TO DATE[a]	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4											30.5	34.4
RAYON STAPLE	28.9	23.8											52.7	66.6
TOTAL ARTIFICIAL (CELLULOSIC)	**44.0**	**39.2**											**83.2**	**101.0**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3											55.2	61.8
- CARPET	86.5	81.1											167.6	152.1
- TEXTILE [f]	28.8	28.1											56.9	67.1
POLYESTER - INDUSTRIAL[d]	27.2	28.6											55.8	58.3
- TEXTILE[f]	56.6	56.2											112.8	144.4
OLEFIN[e]	106.1	115.4											221.5	209.6
TOTAL YARN	**330.1**	**339.7**											**669.8**	**693.3**
STAPLE+TOW+FIBERFILL														
NYLON	88.9	74.9											163.8	160.7
ACRYLIC+MODACRYLIC	40.3	39.6											79.9	87.9
POLYESTER	168.6	177.3											345.9	397.9
OLEFIN	30.3	34.5											64.8	62.7
TOTAL STAPLE	**328.1**	**326.3**											**654.4**	**709.2**
TOTAL SYNTHETIC (NONCELLULOSIC)	**658.2**	**666.0**											**1324.2**	**1402.5**
TOTAL MANUFACTURED FIBER	**702.2**	**705.2**											**1407.4**	**1503.5**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9											9.9	10.9
RAYON STAPLE	20.2	17.2											17.2	13.2
TOTAL ARTIFICIAL (CELLULOSIC)	**29.9**	**27.1**											**27.1**	**24.1**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7											33.7	24.8
- CARPET	60.5	61.2											61.2	63.2
- TEXTILE[f]	57.0	59.9											59.9	48.3
POLYESTER - INDUSTRIAL[d]	39.3	40.6											40.6	31.4
- TEXTILE[f]	94.5	104.9											104.9	76.9
OLEFIN[e]	68.9	67.4											67.4	53.8
TOTAL YARN	**357.0**	**367.7**											**367.7**	**298.4**
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5											40.5	52.9
ACRYLIC+MODACRYLIC	69.5	70.9											70.9	68.3
POLYESTER	193.5	195.1											195.1	163.8
OLEFIN	34.6	33.4											33.4	31.3
TOTAL STAPLE	**337.7**	**339.9**											**339.9**	**316.3**
TOTAL SYNTHETIC (NONCELLULOSIC)	**694.7**	**707.6**											**707.6**	**614.7**
TOTAL MANUFACTURED FIBER	**724.6**	**734.7**											**734.7**	**638.8**
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL														
CARPET CLASS WOOL														
TOTAL RAW WOOL														
RAW COTTON														

a. "Year to date" totals for stock, are the latest month's figures.

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

C 3460-1

FIBER ORGANON

Volume 61, No. 4 ☐ April 1990

A publication of *Fiber Economics Bureau, Inc.*

Highlights

- Imports for Consumption of Silk, Linen, Jute, Sisal and Other Fibers... see page 71.
- U.S. Domestic Consumption of Products Including Other Fibers... begins on page 72.

SHIPMENTS:

In March, total manufactured fiber shipments reached 727 million pounds, 3% above the 704 million pounds shipped in February and 9% below the 795 million pounds shipped in March 1989.

March shipments of synthetic (noncellulosic) filament yarn rose 2% to 345 million pounds and staple+tow rose 4% to 338 million pounds.

Contributing to the increase in shipments over the previous month were nylon staple+tow up 15% or 11 million pounds, polyester industrial yarn up 12% or 4 million pounds and acrylic+modacrylic staple+tow up 3 million pounds or 9%.

Year-to-date domestic shipments of manufactured fiber are down 7% and exports are down 17%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1990 MAR	1990 FEB	% CHG 3/90 - 2/90	1989 MAR	% CHG 3/90 - 3/89	YEAR TO DATE 1990	YEAR TO DATE 1989	% CHG YTD 1990 - 1989
ARTIFICIAL (CELLULOSIC)								
YARN	17.4	15.4	*+13.0*	18.4	*-5.4*	47.9	52.8	*-9.3*
RAYON STAPLE	26.3	25.3	*+4.0*	36.5	*-27.9*	81.7	103.1	*-20.8*
TOTAL ARTIFICIAL (CELL.)	**43.7**	**40.7**	***+7.4***	**54.9**	***-20.4***	**129.6**	**155.9**	***-16.9***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	28.4	30.3	*-6.3*	32.6	*-12.9*	83.6	94.4	*-11.4*
- CARPET	82.2	81.1	*+1.4*	82.0	*+0.2*	249.8	234.1	*+6.7*
- TEXTILE[a]	29.9	28.1	*+6.4*	35.0	*-14.6*	86.8	102.1	*-15.0*
POLYESTER - INDUSTRIAL	32.0	28.5	*+12.3*	30.9	*+3.6*	87.7	89.2	*-1.7*
- TEXTILE[a]	58.0	56.2	*+3.2*	74.4	*-22.0*	170.8	218.8	*-21.9*
OLEFIN	114.9	115.0	*-0.1*	103.6	*+10.9*	335.7	313.2	*+7.2*
TOTAL YARN	**345.4**	**339.2**	***+1.8***	**358.5**	***-3.7***	**1014.4**	**1051.8**	***-3.6***
STAPLE+TOW+FIBERFILL								
NYLON	86.1	74.9	*+15.0*	88.8	*-3.0*	249.9	249.5	*+0.2*
ACRYLIC+MODACRYLIC	43.1	39.6	*+8.8*	48.6	*-11.3*	123.0	136.5	*-9.9*
POLYESTER	173.2	175.4	*-1.3*	212.4	*-18.5*	517.2	610.3	*15.3*
OLEFIN	35.4	34.5	*+2.6*	32.0	*+10.6*	100.2	94.7	*+5.8*
TOTAL STAPLE	**337.8**	**324.4**	***+4.1***	**381.8**	***-11.5***	**990.3**	**1091.0**	***-9.2***
TOTAL SYNTHETIC (NONCELL.)	**683.2**	**663.6**	***+3.0***	**740.3**	***-7.7***	**2004.7**	**2142.8**	***-6.4***
TOTAL MANUFACTURED FIBER	**726.9**	**704.3**	***+3.2***	**795.2**	***-8.6***	**2134.3**	**2298.7**	***-7.2***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS[b]	685.9	666.9	*+2.8*	748.7	*-8.4*	2021.6	2163.8	*-6.6*
EXPORTS[c]	41.0	37.4	*+9.6*	46.5	*-11.8*	112.7	134.9	*-16.5*

[a] Includes low denier industrial yarn.

[b] Includes olefin exports.

[c] Excludes olefin exports.

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FIBER ECONOMICS BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc.
101 Eisenhower Parkway
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U.S.A.
Telephone: (201) 228-1107
Facsimile: (201) 228-7598

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CONTENTS

Features

Other Imports for Consumption **71 - 73**
- Other Fiber Imports for Consumption Detail 71
- U.S. Mill Consumption of Fiber and Domestic Consumption of Products Including Other Fibers 72 - 73

1989 Import/Export Review - Revised **74 - 77**
- Selected U.S. Manufactured Fiber Imports by Country of Origin 74 - 75
- Graph 1: Imports vs. Exports of Manufactured Fiber 76
- Manufactured Fiber Quarterly Trade Balance 76
- U.S. Imports & Exports of Manufactured Fiber - 1989 77

Industry Regulars

Total U.S. Manufactured Fiber Shipments **69**

Monthly U.S. Manufactured Fiber Data **78 - 83**
- Imports by Fiber - 1989 Revised 78
- Exports by Fiber - 1989 Revised 79
- Imports by Country of Origin - 1989 Revised 80
- Imports by Country of Origin 81
- Imports by Fiber 82
- Exports by Fiber 83

Selected U.S. Monthly Fiber Data **84**

TABLE 2:
IMPORTS FOR CONSUMPTION
MILLION POUNDS

YEAR	SILK				LINEN				JUTE				SISAL & OTHERS				TOTAL
	RAW MATL	SEMI-MFRD	FIN-ISHED	TOTAL	RAW MATL	SEMI-MFRD	FIN-ISHED	TOTAL	RAW MATL	SEMI-MFRD	FIN-ISHED	TOTAL	RAW MATL	SEMI-MFRD	FIN-ISHED	TOTAL	IMP TO THE LEFT
1975	1.0	0.9	0.7	2.6	0.8	4.3	28.4	33.5	46.9	488.8	20.8	556.5	84.7	8.4	218.9	312.0	904.6
1976	2.8	1.4	1.3	5.5	0.9	4.8	34.3	40.0	46.2	583.3	60.9	690.4	102.2	7.6	271.3	381.1	1117.0
1977	1.6	2.0	1.8	5.4	0.4	3.4	35.2	39.0	26.7	597.9	29.2	653.8	115.9	3.7	253.6	373.2	1071.4
1978	2.0	3.6	3.5	9.1	1.0	5.2	36.2	42.4	37.6	588.6	38.2	664.4	127.8	8.4	234.0	370.2	1086.1
1979	1.5	2.8	3.9	8.2	0.9	5.1	30.4	36.4	48.5	488.8	13.5	550.8	117.0	4.7	304.8	426.5	1021.9
1980	1.0	3.1	4.4	8.5	0.6	2.9	27.7	31.2	20.9	380.4	13.6	414.9	104.6	5.6	242.2	352.4	807.0
1981	1.9	4.6	1.2	7.7	2.9	2.2	22.2	27.3	34.5	370.4	8.4	413.3	89.8	31.8	224.8	346.4	794.7
1982	2.0	4.2	1.2	7.4	7.8	1.5	20.0	29.3	35.2	268.5	5.8	309.5	85.0	30.0	187.2	302.2	648.4
1983	1.6	6.1	1.4	9.1	3.8	2.3	a	6.1	30.4	297.8	6.6	334.8	70.7	29.5	240.1	340.3	690.3
1984	1.4	7.0	2.3	10.7	4.8	3.2	a	8.0	20.0	261.8	4.8	286.6	69.5	41.4	263.9	374.8	680.1
1985	1.5	6.4	2.3	10.2	3.0	1.3	a	4.3	32.5	201.2	7.2	241.0	66.5	33.8	291.1	391.4	646.9
1986	1.0	6.9	2.4	10.3	3.0	1.7	a	4.7	30.4	230.5	6.9	267.8	68.9	27.1	203.6	299.6	582.4
1987	1.4	8.2	1.6	11.2	2.7	1.5	a	4.2	31.5	247.4	6.4	285.3	69.2	27.1	206.5	302.8	603.5
1988	0.9	8.0	2.2	11.1	3.4	1.5	a	4.9	29.3	175.6	8.0	212.9	50.2	21.2	210.7	282.1	511.0
1989 [b]	1.1	8.8	1.3	11.2	3.6	1.8	a	5.4	15.1	156.1	6.1	177.3	65.6	18.1	199.8	283.5	477.4

SOURCE: U.S. Dept. of Commerce, Office of Textiles & Apparel.

a. Due to changes in the tariff classifications, Linen Finished Goods are included in Sisal & Others Finished Goods.

b. These figures are preliminary for 1989.

Because these fibers are not grown in the United States (flax production is nominal), imports are taken as the total available supply.

SILK: **Raw material** means raw silk plus silk waste & noils. **Semimanufactured** means spun & thrown silk yarns and silk fabrics. **Finished goods** are mainly scarves, handkerchiefs, blouses and laces.

LINEN: **Raw material** includes hackled and unhackled flax, noils, tow & straw. **Semimanufactured** includes linen yarn, sliver & roving. **Finished goods** are mainly fabrics, handkerchiefs, toweling, napery & dresses.

JUTE: **Raw material** includes unmanufactured jute and jute butts. **Semimanufactured** means yarn & roving, new & waste bagging and burlap in the piece. **Finished goods** are mainly cordage, bags and webbing.

SISAL & OTHERS: Includes all of the *hard or leaf fibers* (e.g., abaca or manila hemp, coir, crin, henequen, istle or tampico, sisal, etc.) **imported** into the United States plus the *soft or bast fibers* (e.g., hemp, ramie, sunn, etc.) except flax or linen and jute, which are tabulated separately here. **Semimanufactured** is chiefly coir yarns & roving. **Finished goods** are mainly cordage and twine.

TABLE 3:
U.S. MILL CONSUMPTION OF FIBER AND DOMESTIC CONSUMPTION OF PRODUCTS INCLUDING OTHER FIBERS

MILLION POUNDS & *PERCENT*

	MANUFACTURED FIBER MILL CONSUMPTION=PRODUCERS' SHIPMENTS (DOM) PLUS IMPORTS FOR CONSUMPTION (IMP)																				
	ARTIFICIAL (CELLULOSIC) FIBER											SYNTHETIC (NONCELLULOSIC) FIBER										
	YARN+MONOFIL			STAPLE+TOW			WASTE					YARN+MONOFIL			STAPLE+TOW			WASTE				
YEAR	DOM	IMP	TOTAL	DOM	IMP	TOTAL	SHIP	IMP	EXP	NET	TOTAL	DOM	IMP	TOTAL	DOM	IMP	TOTAL	SHIP	IMP	EXP	NET	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1975	368.6	9.2	377.8	385.4	37.9	423.3	13.2	0.1	12.4	0.9	802.0	3214.8	53.8	3268.6	2553.5	55.2	2608.7	228.7	25.0	50.0	203.7	6081.0
1976	314.5	25.1	339.6	472.0	43.2	515.2	14.7	0.4	14.6	0.5	855.3	3147.2	64.0	3211.2	3018.5	67.3	3085.8	262.3	30.5	70.2	222.6	6519.6
1977	327.5	23.5	351.0	452.9	57.8	510.7	18.5	0.6	12.6	6.5	868.2	3461.4	92.5	3553.9	3373.1	52.9	3426.0	291.0	23.2	66.1	248.1	7228.0
1978	337.6	25.7	363.3	466.2	41.1	507.3	15.7	0.4	7.0	9.1	879.7	3641.9	52.2	3694.1	3505.5	60.5	3566.0	263.9	26.0	88.7	201.2	7461.3
1979	343.4	13.3	356.7	449.4	16.5	465.9	17.2	0.8	9.6	8.4	831.0	3797.6	20.0	3817.6	3713.5	39.3	3752.8	238.6	21.1	137.7	122.0	7692.4
1980	316.7	8.3	325.0	397.7	10.3	408.0	13.5	0.3	6.1	7.7	740.7	3532.0	19.6	3551.6	3482.5	35.6	3518.1	170.2	21.5	116.4	75.3	7145.0
1981	272.9	10.7	283.6	400.9	16.8	417.7	15.3	0.5	2.8	13.0	714.3	3483.1	18.9	3502.0	3327.9	60.5	3388.4	174.2	49.9	107.3	116.8	7007.2
1982	199.1	7.0	206.1	294.7	13.4	308.1	10.7	0.4	3.2	7.9	522.1	2893.9	23.8	2917.7	3037.6	51.2	3088.8	173.2	37.8	86.1	124.9	6131.4
1983	233.1	8.7	241.8	334.9	13.6	348.5	9.4	0.3	1.4	8.3	598.6	3385.4	48.3	3433.7	3671.9	101.4	3773.3	214.1	46.1	71.3	188.9	7395.9
1984	218.3	10.0	228.3	332.3	17.0	349.3	11.4	0.5	1.6	10.3	587.9	3308.6	90.0	3398.6	3494.2	131.1	3625.3	216.9	50.5	89.7	177.7	7201.6
1985	187.1	13.9	201.0	324.2	12.3	336.5	8.8	0.5	1.2	8.1	545.6	3559.2	104.6	3663.8	3441.4	159.4	3600.8	260.2	40.7	75.6	225.3	7489.9
1986	192.1	17.0	209.1	373.5	17.4	390.9	10.4	0.1	2.2	8.3	608.3	3621.2	126.1	3747.3	3737.4	182.8	3920.2	261.5	40.3	123.7	178.1	7845.6
1987	166.8	12.8	179.6	383.6	13.8	397.4	9.6	0.1	1.1	8.6	585.6	3803.2	123.9	3927.1	3987.4	189.0	4176.4	239.1	47.0	113.5	172.6	8276.1
1988	182.6	17.6	200.2	386.5	20.4	406.9	7.8	+	2.0	5.8	612.9	3929.6	116.3	4045.9	4022.0	196.2	4218.2	244.8	40.5	144.4	140.9	8405.0
1989	187.3	25.4	212.7	338.2	54.0	392.2	6.0	0.6	11.6	-5.0	599.9	3912.0	182.2	4094.2	3994.8	192.4	4187.2	188.5	48.0	141.4	95.1	8376.5

Continued on opposite page

TABLE 3:
U.S. MILL CONSUMPTION OF FIBER AND DOMESTIC CONSUMPTION OF PRODUCTS INCLUDING OTHER FIBERS *(CONTINUED)*
MILLION POUNDS & *PERCENT*

	MILL CONSUMPTION OF 4 FIBERS										DOMESTIC CONSUMPTION OF 4 FIBERS (CONS)=MILL CONSUMPTION+IMPORTS (IMP) LESS EXPORTS (EXP) OF SEMIMANUFACTURED & MANUFACTURED PRODUCTS												
	MANUFAC. FIBER		COTTON		WOOL		OTHER FIBERS		TOTAL		MANUFACTURED FIBER			COTTON			WOOL			OTHER FIBERS	TOTAL		
YEAR	LB	%	LB	%	LB	%	LB	%	LB	%	IMP	EXP	CONS	IMP	EXP	CONS	IMP	EXP	CONS	IMP	IMP	EXP	CONS
	(23)		(24)		(25)		(26)		(27)		(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1975	6383.0	67.4	3068.7	30.0	132.0	1.3	133.4	1.3	10217.1	100.0	400.4	322.4	6961.0	501.3	353.7	3216.3	48.6	19.2	161.4	904.6	1854.9	695.3	11243.3
1976	7374.9	66.7	3389.0	30.6	145.9	1.3	152.1	1.4	11061.9	100.0	479.5	352.2	7502.2	708.6	413.2	3684.4	66.7	13.9	198.7	1117.0	2371.8	779.3	12502.3
1977	8096.2	70.1	3169.8	27.5	133.9	1.2	144.6	1.3	11544.5	100.0	530.7	367.7	8259.2	669.4	369.5	3469.7	85.9	11.5	208.3	1071.4	2357.4	748.7	13008.6
1978	8341.0	71.3	3040.4	26.0	141.6	1.2	168.4	1.4	11691.4	100.0	642.6	441.7	8541.9	845.4	355.7	3530.1	92.2	11.6	222.2	1086.1	2666.3	809.0	13380.3
1979	8523.4	71.7	3066.4	25.8	134.4	1.1	167.9	1.4	11892.1	100.0	525.0	596.6	8451.8	746.1	478.0	3334.5	80.6	14.0	201.0	1021.9	2373.6	1088.6	13009.2
1980	7885.7	70.3	3064.4	27.3	137.8	1.2	127.1	1.1	11215.0	100.0	540.6	771.5	7654.8	810.9	523.1	3352.2	85.1	23.8	199.1	807.0	2243.6	1318.4	12013.1
1981	7721.5	71.9	2730.8	25.4	152.7	1.4	129.1	1.2	10734.1	100.0	639.1	637.7	7722.9	961.9	367.3	3325.4	93.1	11.8	234.0	794.7	2488.8	1016.8	12077.0
1982	6653.5	70.8	2478.9	26.4	129.5	1.4	130.0	1.4	9391.9	100.0	697.9	438.5	6912.9	897.2	253.4	3122.7	100.1	10.8	218.8	648.4	2343.6	702.7	10902.8
1983	7994.5	72.3	2795.7	25.3	162.5	1.5	106.5	1.0	11059.2	100.0	1069.4	460.7	8603.2	1135.4	219.6	3711.5	149.8	11.6	300.7	690.3	3044.9	691.9	13305.7
1984	7789.5	72.7	2668.2	24.9	163.2	1.5	95.7	0.9	10716.6	100.0	1342.6	487.9	8644.2	1465.6	204.6	3929.2	210.2	12.0	361.4	680.1	3698.5	704.5	13614.9
1985	8035.5	72.6	2796.0	25.3	134.7	1.2	103.6	0.9	11069.8	100.0	1491.0	499.1	9027.4	1629.2	213.2	4212.0	264.8	17.8	381.7	646.9	4031.9	730.1	14268.0
1986	8453.9	70.3	3301.7	27.5	164.5	1.4	103.3	0.9	12023.4	100.0	1703.0	519.3	9637.6	1910.5	274.8	4937.4	275.6	16.0	424.1	582.4	4471.5	810.1	15581.5
1987	8861.7	68.9	3736.5	29.0	167.6	1.3	104.8	0.8	12870.6	100.0	1805.4	591.9	10075.2	2335.7	298.0	5774.2	258.3	21.3	404.6	603.5	5002.9	911.2	16857.5
1988	9017.4	70.9	3470.1	27.3	156.1	1.2	83.8	0.7	12727.4	100.0	1735.7	684.6	10068.5	2118.8	330.2	5258.7	242.4	30.6	367.9	511.0	4607.9	1045.4	16206.1
1989	8976.4	68.2	3937.1	29.9	153.9	1.2	85.4	0.6	13152.8	100.0	*1820.0	*740.0	10056.4	*2440.0	*360.0	6017.1	*215.0	*33.0	335.9	*477.4	*4952.4	*1133.0	16886.8

NOTE Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the March 1985 issue.

* **Preliminary estimates derived from Department of Commerce data.**

SOURCES OF DATA, ARRANGED BY COLUMN NUMBER ( ):

1 & 4: March issue on page 56
12 & 15: March issue on page 57
7 & 18: March issue on page 60
2: For 1975 - 1988: Import Classes 309.0310, .0610, .2000, 310.0106, .0130, .0206, .0230 & .0610.
For 1989: Import Classes 5403.10.3[illegible]03.10.30.40, 5403.10.60.00, 5403.20.30.00, 5403.20.60.00, 5403.[illegible]0.20 - 5403.39.00.40, 5403.41.10.00 - 5403.49.00.00, 5405.00.30.00 & 5405.00.60.00.
5: For 1975 - 1988: Import Classes 309.3010, .3310, .4320 & .4325.
For 1989: Import Classes 5504.10.00.00, 5504.90.00.00, 5502.00.00.00 & 5507.00.00.00.
8: For 1975 - 1988: Import Classes 309.6615 & .7510.
For 1989: Import Class 5505.20.00.00.
9: For 1975 - 1988: Export Class 309.7400.
For 1989: Export Class 5505.20.00.00.
13: For 1975 - 1988: Import Classes 309.0200, .0330, .0340, .0365, .0500, .0630, .0640, .0665, .2100, .2500, 310.0107, .0108, .0110, .0114, .0149, .0150, .0170, .0207, .0208, .0210, .0214, .0249, .0250, .0270, .0550, .0630 & .0650.
For 1989: Import Classes 5402.10.30.20, 5402.10.30.40, 5402.10.60.00, 5402.31.30.00, 5402.31.60.00, 5402.32.30.00, 5402.32.60.00, 5402.41.00.20, 5402.41.00.40, 5402.51.00.00, 5402.61.00.00, 5404.10.20.20, 5402.20.30.20, 5402.20.30.40, 5402.20.60.00, 5402.33.30.00, 5402.33.60.00, 5402.42.00.00, 5402.43.00.20, 5402.43.00.40, 5402.52.00.00, 5402.62.00.00, 5404.10.20.40, 5402.39.30.00, 5402.39.30.10, 5402.39.30.90, 5402.39.60.00, 5402.39.60.10, 5402.39.60.90, 5402.49.00.10, 5402.49.00.30, 5402.49.00.60, 5402.49.00.80, 5402.59.00.00, 5402.69.00.00, 5404.10.10.00, 5404.10.20.90 & 5404.90.00.00.
16: For 1975 - 1988: Import Classes 309.3030, .3040, .3050, .3065, .3200, .3340, .3350, .3365, .4331, .4336, .4341, .4351, .4361, .4366, .4371 & .4390.
For 1989: Import Classes 5503.10.00.00, 5503.20.00.00, 5503.30.00.00, 5503.40.00.00, 5503.90.00.00, 5501.10.00.00, 5501.20.00.00, 5501.30.00.00, 5501.90.00.00, 5506.10.00.00, 5506.20.00.00, 5506.30.00.00 & 5506.90.00.00
19: For 1975 - 1988: Import Classes 309.6625, .6630, .6645, .6660, .7000 & .7525 - .7555.
For 1989: Import Classes 5505.10.00.20, 5505.10.00.40 & 5505.10.00.60.
20: For 1975 - 1988: Export Classes 309.7620, .7630, .7640 & .7660.
For 1989: Export Classes 5505.10.00.20, 5505.10.00.40 & 5505.10.00.60.
24: U.S. Census Bureau Report M22P.
25: U.S. Census Bureau Report M22D.
26: For 1975 - 1988: Import Classes 308.0200 - .2000
28, 29, 31, 32, 34 & 35: ***Cotton and Wool Outlook & Situation,*** U.S. Department of Agriculture.
37: This issue page 71.

CERTAIN TOTALS IN THE TABLES:

(Obvious totals such as Columns 1+2=3, 4+5=6, etc. are not described here.)
10: Columns 7+8-9
21: Columns 18+19-20
23: Columns 11+22
30: Columns 23+28-29
33: Columns 24+31-32
36: Columns 25+34-35
40: Columns 27+38-39-26

TABLE 4:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN[a] REVISED
THOUSAND POUNDS

COUNTRY	A. SYNTHETIC (NONCELLULOSIC) YARN - SINGLES						B. SYNTHETIC (NONCELLULOSIC) STAPLE+TOW								C. SPUN YARNS •				D. WASTE			
	NYLON		POLYESTER		OTHER		NYLON		POLYESTER		ACRYLIC		OTHER		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)	
	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
AUSTRIA	7	8	24	0	51	79	21	39	0	0	0	0	6507	150	142	0	157	126	0	0	0	
BELGIUM/LUXEMBOURG	518	3282	0	2	10052	1105	90	37	204	964	57	0	615	44	0	0	1	5	0	0	420	
DENMARK	0	0	0	7	0	0	0	0	0	0	0	0	56	0	0	0	0	0	2	0	0	0
FINLAND	0	0	0	6	0	0	0	0	0	0	0	0	73	0	0	0	80	0	0	0	0	0
FRANCE	6118	11784	10	311	41	1	10454	4007	515	0	42	0	214	0	1	0	353	705	0	0	966	757
GERMANY, FED. REP. OF	3176	17284	6635	9566	3370	206	18688	4499	2736	3023	10422	8540	2153	702	160	0	1964	2289	0	46	2587	3260
GREECE	0	0	0	0	1	12	0	0	0	0	0	0	0	0	0	0	605	740	0	0	0	0
IRELAND	0	0	0	41	931	787	0	0	3062	1489	0	0	0	0	0	0	0	7	0	0	0	281
ITALY	9908	7101	40	85	195	234	572	263	182	6	678	1519	256	767	0	0	2226	5919	1	0	0	0
NETHERLANDS	160	1034	119	204	118	538	20	0	176	1631	0	0	32	3	0	0	0	74	0	0	2597	2990
PORTUGAL	0	0	0	0	0	294	2	0	0	0	0	0	0	0	0	0	0	254	0	0	0	0
SPAIN	0	26	95	0	340	66	8	0	0	8	2	456	569	31	0	0	257	99	0	82	242	0
SWITZERLAND	5	6	33	11	3	3	749	1805	68	92	135	0	769	7	0	0	67	16	0	0	315	794
UNITED KINGDOM	7625	17711	978	690	1126	1500	12990	5691	99	209	9465	13737	0	90	5	0	379	1006	0	35	3133	3237
OTHER	106	98[a]	0	49[d]	101	104[h]	259	0	0	866[j]	0	0	0	0	0	0	1331	2410[n]	0	0	0	0
TOTAL WESTERN EUROPE	**27623**	**58334**	**7934**	**10972**	**16329**	**4929**	**43853**	**16341**	**7042**	**8288**	**20801**	**24252**	**11244**	**1794**	**308**	**0**	**7420**	**13650**	**3**	**163**	**10260**	**11365**
POLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROMANIA	0	0	912	86	0	0	1200	0	1174	202	0	0	0	0	0	0	1892	0	0	0	0	0
OTHER	0	0	0	11[e]	0	0	0	0	0	0	0	0	59	42[l]	0	0	1115	1781[o]	0	0	0	0
TOTAL EASTERN EUROPE	**0**	**0**	**912**	**97**	**0**	**0**	**1200**	**0**	**1174**	**202**	**0**	**0**	**59**	**42**	**0**	**0**	**3007**	**1781**	**0**	**0**	**0**	**0**
CANADA	**3781**	**17777**	**3062**	**1803**	**15206**	**17432**	**15968**	**8058**	**10203**	**5697**	**6**	**6**	**2626**	**1721**	**6**	**0**	**1019**	**2976**	**4**	**367**	**12319**	**13922**
ARGENTINA	179	44	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	892	476
BRAZIL	1	0	1116	61	0	544	0	10	0	0	0	0	140	122	0	0	58	4446	0	0	0	0
COSTA RICA	0	3	6428	5882	0	0	0	0	0	0	0	0	0	0	0	0	0	61	0	0	80	130
MEXICO	3610	4759	14458	19014	829	986	6	0	5454	8269	1577	2931	251	37	0	0	2048	5623	0	0	7092	10768
OTHER	0	15[b]	89	944[f]	313	0	0	0	0	0	0	0	0	1[m]	0	0	285	333[p]	0	0	0	29[s]
TOTAL OTHER AMERICA	**3790**	**4821**	**22091**	**25947**	**1142**	**1530**	**6**	**10**	**5454**	**8269**	**1577**	**2931**	**391**	**160**	**0**	**0**	**2391**	**10463**	**0**	**0**	**8064**	**11403**
BANGLADESH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HONG KONG	0	0	0	0	3	0	61	3	0	89	0	0	0	0	0	0	0	0	0	0	0	0
INDONESIA	0	0	0	0	0	0	0	0	0	370	0	0	0	0	0	0	649	845	0	0	0	0
KOREA, REP. OF	8	0	0	23	2	80	0	0	20736	41345	0	0	247	1199	0	0	268	2355	0	0	2368	3962
MALAYSIA	0	0	0	0	0	0	0	0	476	87	0	0	0	0	0	0	862	1224	0	0	0	0
PHILIPPINES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	43	0	0	75	0
SINGAPORE	0	0	0	157	0	0	0	0	0	0	0	0	0	0	0	0	929	2357	0	0	0	43
TAIWAN	0	157	110	17285	121	6	3	0	9438	25901	81	0	2528	38	0	0	249	883	0	44	0	1120
THAILAND	0	970	5	13	0	158	0	0	0	3	0	0	0	0	0	0	719	4958	0	0	0	0
OTHER	0	0	0	0	0	0	0	36[i]	12022	17269[k]	0	0	0	0	0	0	0	78[q]	0	0	0	26[t]
TOTAL OTHER ASIA	**8**	**1127**	**115**	**17478**	**126**	**244**	**64**	**39**	**42672**	**85064**	**81**	**0**	**2775**	**1237**	**0**	**0**	**3806**	**12743**	**0**	**44**	**2443**	**5151**

TABLE 4:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN[a] REVISED *(CONTINUED)*
THOUSAND POUNDS

	A. SYNTHETIC (NONCELLULOSIC) YARN - SINGLES						B. SYNTHETIC (NONCELLULOSIC) STAPLE+TOW								C. SPUN YARNS *				D. WASTE			
	NYLON		POLYESTER		OTHER		NYLON		POLYESTER		ACRYLIC		OTHER		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)	
COUNTRY	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
CHINA, PRC	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	2789	4284	0	0	906	0
JAPAN	87	453	2391	5142	588	2790	701	983	10982	11052	12256	10331	4345	1999	500	0	1500	852	0	0	3723	3405
AUSTRALIA	0	46	53	0	0	5	275	604	23	94	0	0	194	95	0	0	6	170	0	0	1473	1884
EGYPT	0	0	0	258	0	0	0	0	3	0	2	0	0	0	0	0	0	1233	0	0	0	0
ISRAEL	2884	1746	98	229	1	90	88	169	0	0	14	0	0	0	0	0	0	0	0	0	1316	891
NEW ZEALAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH AFRICA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	37[c]	0	28[g]	0	0	0	0	0	0	70	0	0	0	0	0	268	621[f]	0	0	0	0
TOTAL M.E., A. & O.	2884	1829	151	515	1	95	363	773	26	94	86	0	194	95	0	0	274	2024	0	0	2789	2775
GRAND TOTAL	38173	84341	36656	61954	33392	27020	62155	26204	77553	118666	34807	37520	21639	7050	814	0	22206	48773	7	574	40504	48021

SOURCE: U.S. Census Bureau Report IM146.

- * **Revised.**
- + Less than 1 thousand pounds.

For 1988 the commodity numbers are:

A. Nylon 310.0107, .0108, .0149, .0207, .0208 & .0249.
Polyester 310.0110, .0150, .0210 & .0250.
Other 310.0114, .0170, .0214, .0270, .0530, .0550, .0630 & .0650.

B. Nylon 309.3030, .3200, .4331 & .4351.
Polyester 309.3040, .3340, .4336 & .4361.
Acrylic 309.3050, .3350 & .4366.
Other 309.3065, .3365, .4341, .4371 & .4390.

C. Artificial (Cellulosic) 310.4005, .4030, .5005 & .5030.
Synthetic (Noncellulosic) 310.4015, .4027, .4046, .4047, .4050, .5015, .5046, .5047, .5049 & .5051.

D. Artificial (Cellulosic) 309.6615 & .7510.
Synthetic (Noncellulosic) 309.6625, .6630, .6645, .6660, .7000, .7525, .7530, .7540 & .7555.

For 1989 the Harmonized Tariff Schedule numbers are:

A. Nylon 5402.10.30.20, 5402.10.30.40, 5402.10.60.00, 5402.31.30.00, 5402.31.60.00, 5402.32.30.00, 5402.32.60.00, 5402.41.00.20, 5402.41.00.40, 5402.51.00.00 & 5402.61.00.00.
Polyester 5402.20.30.20, 5402.20.30.40, 5402.20.60.00, 5402.33.30.00, 5402.33.60.00, 5402.42.00.00, 5402.43.00.20, 5402.43.00.40, 5402.52.00.00 & 5402.62.00.00.
Other 5402.39.30.00, 5402.39.30.10, 5402.39.30.90, 5402.39.60.00, 5402.39.60.10, 5402.39.60.90, 5402.49.00.10, 5402.49.00.30, 5402.49.00.60, 5402.49.00.80, 5402.59.00.00 & 5402.69.00.00.

B. Nylon 5503.10.00.00 & 5501.10.00.00.
Polyester 5503.20.00.00 & 5501.20.00.00.
Acrylic 5503.30.00.00 & 5501.30.00.00.
Other 5503.40.00.00, 5503.90.00.00 & 5501.90.00.00.

C. Artificial (Cellulosic) 5510.00.00.00, 5510.90.20.00, 5510.12.00.00, 5510.90.40.00, 5510.20.00.00, 5510.30.00.00 & 5510.90.60.00.
Synthetic (Noncellulosic) 5509.11.00.00, 5509.21.00.00, 5509.51.30.00, 5509.31.00.00, 5509.41.00.00, 5509.69.20.00, 5509.99.20.00, 5509.12.00.00, 5509.22.00.10, 5509.22.00.90, 5509.51.60.00, 5509.32.00.00, 5509.42.00.00, 5509.69.40.00, 5509.99.40.00, 5509.52.00.00, 5509.53.00.30, 5509.53.00.60, 5509.59.00.00, 5509.61.00.00, 5509.62.00.00, 5509.69.60.00, 5509.91.00.00, 5509.92.00.00 & 5509.99.60.00.

D. Artificial (Cellulosic) 5505.20.00.00.
Synthetic (Noncellulosic) 5505.10.00.20, 5505.10.00.40 & 5505.10.00.60.

a. Turkey 76, Sweden 22.
b. Peru 13, Haiti 2.
c. Morocco 37.
d. Turkey 49.
e. Yugoslavia 11.
f. Ecuador 632, Peru 171, El Salvador 80, Colombia 41, Honduras 20.
g. Nigeria 28.
h. Turkey 104.
i. India 36.
j. Turkey 866.
k. India 17269.
l. Germany, Dem. Rep. 42.
m. Venezuela 1.
n. Turkey 2405, Norway 5.
o. Hungary 1144, Yugoslavia 637.
p. Colombia 171, Honduras 149, Venezuela 12, Guatemala 1.
q. Pakistan 78.
r. Mauritius 593, Mozambique 28.
s. Venezuela 29.
t. India 26.

GRAPH 1:
IMPORTS VS. EXPORTS OF MANUFACTURED FIBER REVISED

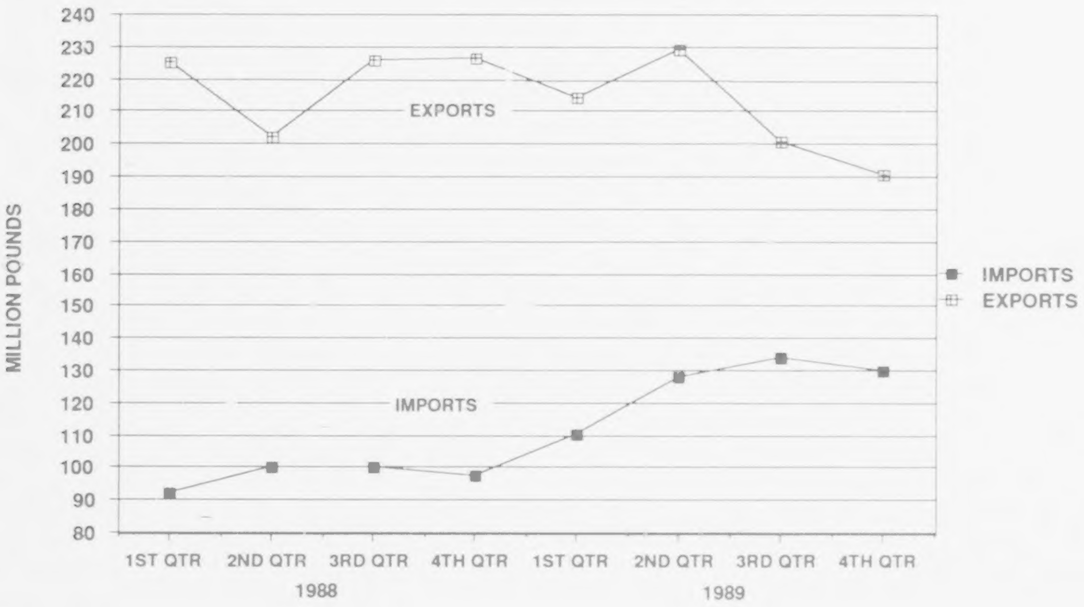

TABLE 5:
MANUFACTURED FIBER QUARTERLY TRADE BALANCE REVISED

MILLION POUNDS

	ARTIFICIAL (CELLULOSIC) YARN & MONOFIL			ARTIFICIAL (CELLULOSIC) STAPLE+TOW			SYNTHETIC (NONCELLULOSIC) YARN & MONOFIL			SYNTHETIC (NONCELLULOSIC) STAPLE+TOW			ARTIFICIAL (CELLULOSIC) WASTE			SYNTHETIC (NONCELLULOSIC) WASTE			TOTAL		
	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL	IMP	EXP	BAL
1988																					
1ST QUARTER	4.0	2.4	(1.6)	3.3	5.1	1.8	29.8	74.0	44.2	43.3	111.9	68.6	+	0.6	0.6	11.8	31.0	19.2	92.2	225.0	132.8
2ND QUARTER	4.0	3.9	(0.1)	4.1	7.0	2.9	28.1	70.3	42.2	53.7	88.3	34.6	0	0.4	0.4	10.6	32.1	21.5	100.5	202.0	101.5
3RD QUARTER	4.4	3.7	(0.7)	6.0	6.8	0.8	30.2	79.1	48.9	51.0	100.6	49.6	0	0.7	0.7	8.6	35.1	26.5	100.2	226.0	125.8
4TH QUARTER	5.2	2.6	(2.6)	6.9	5.6	(1.3)	28.1	73.6	45.5	48.1	98.3	50.2	+	0.2	0.2	9.5	46.1	36.6	97.8	226.4	128.6
TOTAL	17.6	12.6	(5.0)	20.3	24.5	4.2	116.2	297.0	180.8	196.1	399.1	203.0	+	1.9	1.9	40.5	144.3	103.8	390.7	879.4	488.7
1989																					
1ST QUARTER	*6.3	1.5	*(4.8)	15.1	6.0	(9.1)	38.9	85.3	46.4	41.0	80.3	39.3	0.2	3.4	3.2	9.2	38.1	28.9	*110.7	214.6	*103.9
2ND QUARTER	*5.9	0.3	*(5.6)	13.3	4.6	(8.7)	49.3	90.2	40.9	49.2	91.3	42.1	0.2	3.9	3.7	10.3	38.6	28.3	*128.2	228.9	*100.7
3RD QUARTER	*7.3	1.5	*(5.8)	12.4	6.0	(6.4)	51.5	78.9	27.4	50.1	78.0	27.9	0.1	2.1	2.0	12.6	34.6	22.0	*134.0	201.1	*67.1
4TH QUARTER	*6.8	1.0	*(5.8)	13.2	3.5	(9.7)	42.5	81.3	38.8	52.1	72.9	20.8	+	2.2	2.2	15.9	30.1	14.2	*130.5	191.0	*60.5
TOTAL	*26.3	4.3	*(22.0)	54.0	20.1	(33.9)	182.2	335.7	153.5	192.4	322.5	130.1	0.5	11.6	11.1	48.0	141.4	93.4	*503.4	835.6	*332.2

SOURCES: The fiber import and export data are from the U.S. Bureau of the Census (Reports IM145X and EM522).
* REVISED

TABLE 6:
U.S. MANUFACTURED FIBER IMPORTS & EXPORTS REVISED

THOUSAND POUNDS

ITEM	IMPORTS	EXPORTS
	1989	1989
ARTIFICIAL (CELLULOSIC) FIBER		
FILAMENT YARN		
HIGH TENACITY	2456	956
TEXTURED	1380	1977
OTHER *	21400	974
MONOFILAMENTS & STRIPS	1022	362
SUBTOTAL ABOVE	**26258**	**4269**
STAPLE	53140	19196
TOW	800	
TOPS	55	895
SUBTOTAL ABOVE	**53995**	**20091**
WASTE	**574**	**11554**
SYNTHETIC (NONCELLULOSIC) FIBERS		
FILAMENT YARN		
NYLON		
HIGH TENACITY	19511	108014
TEXTURED		
UP TO 450 DENIER	3550	9182
OVER 450 DENIER	14098	50037
OTHER	47182	25207
MONOFILAMENTS & STRIPS	1303	1908
SUBTOTAL ABOVE	**85644**	**194348**
POLYESTER		
HIGH TENACITY	7810	39124
TEXTURED	18939	33544
POY	16274	16687
OTHER	18931	10354
MONOFILAMENTS & STRIPS	737	3187
SUBTOTAL ABOVE	**62691**	**102896**
OTHER SYNTHETIC FILAMENT		
TEXTURED	19246	9165
OTHER	7774	20443
MONOFILAMENTS & STRIPS	6890	8874
SUBTOTAL ABOVE	**33910**	**38482**
STAPLE		
NYLON	21711	32261
POLYESTER	117697	111985
ACRYLIC	17937	73604
POLYPROPYLENE	2093	27344
OTHER	4373	19593
TOW		
NYLON	4493	992
POLYESTER	969	4244
ACRYLIC	19583	18532
OTHER	584	1398
TOPS	2977	32592
SUBTOTAL ABOVE	**192417**	**322545**
WASTE		
NYLON	23982	29594
POLYESTER	17038	41872
OTHER	7001	69923
TOTAL MANUFACTURED FIBERS ABOVE	**503510**	**835574**
OTHER MFRD. FIBER YARN & THREAD		
SEWING THREAD		
FILAMENT	1375	732
SPUN YARN	5129	0
SPUN YARNS		
SYNTHETIC *	48773	36078
ARTIFICIAL *	0	0
PUT UP FOR RETAIL SALE	591	7985
GRAND TOTAL ABOVE	**559378**	**880369**

SOURCE: U.S. Census Bureau Report IM146 and EM522

* **Revised.**

Effective January 1,1989 the U.S. Imports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

TABLE 7:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	REVISED 1989												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	114	266	408	205	111	192	176	252	148	175	202	207	2456	
TEXTURED	180	1	0	24	0	27	497	58	275	222	65	31	1380	
OTHER *	1767	1579	1693	1499	1773	1758	1485	2079	1978	2164	2559	1066	21400	
MONOFILAMENTS & STRIPS	96	40	120	150	73	38	151	95	105	29	73	52	1022	
SUBTOTAL ABOVE	**2157**	**1886**	**2221**	**1878**	**1957**	**2015**	**2309**	**2484**	**2506**	**2590**	**2899**	**1356**	**26258**	**17641**
STAPLE	5924	3481	5624	4403	5312	3419	3113	5451	3512	4825	4631	3445	53140	
TOW	47	0	0	7	103	0	24	72	207	141	108	91	800	
TOPS	6	10	20	10	5	0	0	4	0	0	0	0	55	
SUBTOTAL ABOVE	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**	**4966**	**4739**	**3536**	**53995**	**20401**
WASTE	**18**	**122**	**47**	**213**	**0**	**0**	**0**	**94**	**44**	**0**	**0**	**36**	**574**	**7**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1037	1093	1506	1578	1829	1964	1480	1706	1698	2290	1692	1638	19511	
TEXTURED														
UP TO 450 DENIER	385	217	359	285	319	315	333	428	270	234	237	168	3550	
OVER 450 DENIER	1311	1054	1428	1294	1241	654	943	865	1164	1360	1191	1593	14098	
OTHER	3820	3306	3786	3845	4296	5210	4007	4096	3664	3623	3627	3902	47182	
MONOFILAMENTS & STRIPS	72	159	58	113	143	116	120	63	89	132	176	62	1303	
SUBTOTAL ABOVE	**6625**	**5829**	**7137**	**7115**	**7828**	**8259**	**6883**	**7158**	**6885**	**7639**	**6923**	**7363**	**85644**	**38173**
POLYESTER														
HIGH TENACITY	957	880	909	488	797	703	361	603	557	686	445	424	7810	
TEXTURED	883	1673	1738	1766	1775	2385	1747	2230	1822	1231	911	778	18939	
POY	0	40	642	1088	2744	3214	3170	2407	989	821	936	223	16274	
OTHER	1152	1481	1719	1740	1324	1567	1551	1815	1487	2012	1968	1115	18931	
MONOFILAMENTS & STRIPS	65	80	34	55	24	70	73	65	171	27	50	23	737	
SUBTOTAL ABOVE	**3057**	**4154**	**5042**	**5137**	**6664**	**7939**	**6902**	**7120**	**5026**	**4777**	**4310**	**2563**	**62691**	**36656**
OTHER SYNTHETIC FILAMENT														
TEXTURED	2057	1685	1550	1054	2074	1555	1199	1981	1981	2030	1407	673	19246	
OTHER	261	386	339	274	171	136	1049	1015	944	1276	808	1115	7774	
MONOFILAMENTS & STRIPS	147	299	308	324	395	357	1823	364	1236	1043	357	237	6890	
SUBTOTAL ABOVE	**2465**	**2370**	**2197**	**1652**	**2640**	**2048**	**4071**	**3360**	**4161**	**4349**	**2572**	**2025**	**33910**	**41449**
STAPLE														
NYLON	1726	1896	1845	1592	1422	1273	1445	1611	1396	2017	2716	2772	21711	
POLYESTER	5584	5594	10047	10627	10327	8674	9941	11597	12729	10748	11419	10410	117697	
ACRYLIC	1934	1028	1576	1518	1206	1511	1335	2194	839	1868	1509	1419	17937	
POLYPROPYLENE	44	55	197	351	93	220	298	55	150	374	148	108	2093	
OTHER	172	1040	651	740	167	165	259	245	83	272	371	208	4373	
TOW														
NYLON	237	433	257	504	341	315	225	524	221	623	406	407	4493	
POLYESTER	47	78	131	49	140	114	31	32	203	102	0	42	969	
ACRYLIC	2023	1709	1127	2522	2868	1462	1574	837	1751	1197	1235	1278	19583	
OTHER	117	120	146	0	0	14	0	15	0	0	15	157	584	
TOPS	488	358	398	437	334	201	216	136	116	75	163	55	2977	
SUBTOTAL ABOVE	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**	**17276**	**17982**	**16856**	**192417**	**196154**
WASTE														
NYLON	1971	1804	1754	2087	1949	2027	1769	2266	1265	2170	2724	2196	23982	
POLYESTER	999	340	730	1029	846	973	1475	2106	1821	1942	2028	2749	17038	
OTHER	396	725	477	486	547	389	326	675	897	850	754	479	7001	
TOTAL MANUFACTURED FIBERS ABOVE	**36037**	**33032**	**41624**	**42357**	**44749**	**41018**	**42196**	**48036**	**43812**	**46559**	**44931**	**39159**	**503510**	**390985**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	229	84	46	26	74	73	105	171	124	198	128	117	1375	
SPUN YARN	492	396	370	287	418	406	466	798	368	374	412	342	5129	
SPUN YARNS														
SYNTHETIC *	4960	4430	4640	4589	4699	5175	4939	4024	2972	3644	2321	2380	48773	
ARTIFICIAL *	0	0	0	0	0	0	0	0	0	0	0	0	0	
PUT UP FOR RETAIL SALE	71	50	27	37	65	38	128	63	21	32	26	33	591	
GRAND TOTAL ABOVE	**41789**	**37992**	**46707**	**47296**	**50005**	**46710**	**47834**	**53092**	**47297**	**50807**	**47818**	**42031**	**559378**	**481050**

SOURCE: U.S. Census Bureau Report IM145X.

* **Revised**

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U.S. Monthly Imports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 32.

TABLE 8:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

	1989 REVISED												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	9	13	45	26	30	16	74	117	78	82	66	400	956	
TEXTURED	463	17	29	1	29	28	1009	26	26	0	16	333	1977	
OTHER	694	63	18	60	21	15	51	30	6	5	3	8	974	
MONOFILAMENTS & STRIPS	90	0	7	93	5	9	21	12	2	8	34	81	362	
SUBTOTAL ABOVE	**1256**	**93**	**99**	**180**	**85**	**68**	**1155**	**185**	**112**	**95**	**119**	**822**	**4269**	**12657**
STAPLE	2827	1786	1325	920	1659	1786	2084	2167	1495	835	1112	1200	19196	
TOPS	94	0	8	129	53	48	7	101	133	143	0	179	895	
SUBTOTAL ABOVE	**2921**	**1786**	**1333**	**1049**	**1712**	**1834**	**2091**	**2268**	**1628**	**978**	**1112**	**1379**	**20091**	**24555**
WASTE	**1303**	**559**	**1587**	**1116**	**1635**	**1108**	**1021**	**551**	**491**	**674**	**969**	**540**	**11554**	**1921**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	9331	9410	7884	16614	6326	6999	11613	7987	7577	6351	9433	8489	108014	
TEXTURED														
UP TO 450 DENIER	522	586	719	666	819	1271	488	856	954	951	585	765	9182	
OVER 450 DENIER	4706	5051	5459	4430	4096	3626	3176	4030	3042	4025	3684	4712	50037	
OTHER	2038	2103	2133	2188	2571	2003	1669	2028	1758	2422	2077	2217	25207	
MONOFILAMENTS & STRIPS	239	258	187	131	204	303	282	134	27	45	33	65	1908	
SUBTOTAL ABOVE	**16836**	**17408**	**16382**	**24029**	**14016**	**14202**	**17228**	**15035**	**13358**	**13794**	**15812**	**16248**	**194348**	**161620**
POLYESTER														
HIGH TENACITY	3031	3122	2773	3282	4214	4080	3334	3490	2679	4170	2317	2632	39124	
TEXTURED	3651	3677	2385	2939	3208	3577	1341	2557	2583	2683	2938	2005	33544	
POY	939	1250	2204	1446	629	528	2782	289	655	4749	624	592	16687	
OTHER	1007	584	829	983	777	1186	933	722	975	738	1004	616	10354	
MONOFILAMENTS & STRIPS	208	213	203	132	302	332	275	346	353	237	338	248	3187	
SUBTOTAL ABOVE	**8836**	**8846**	**8394**	**8782**	**9130**	**9703**	**8665**	**7404**	**7245**	**12577**	**7221**	**6093**	**102896**	**90937**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1033	457	872	903	992	634	980	995	603	439	544	713	9165	
OTHER	1342	1471	1735	1730	1559	1332	1724	1527	1938	2032	2586	1467	20443	
MONOFILAMENTS & STRIPS	486	421	771	1317	927	987	687	860	675	538	726	479	8874	
SUBTOTAL ABOVE	**2861**	**2349**	**3378**	**3950**	**3478**	**2953**	**3391**	**3382**	**3216**	**3009**	**3856**	**2659**	**38482**	**44521**
STAPLE														
NYLON	2605	3265	3262	2629	3280	3985	2532	1797	2075	2333	1980	2518	32261	
POLYESTER	14048	10762	12940	12923	10675	7497	8203	8432	6815	7025	5725	6940	111985	
ACRYLIC	3326	5674	6643	6896	6342	9369	8569	6419	4571	7585	4605	3605	73604	
POLYPROPYLENE	1336	1569	1129	2264	2714	2477	1995	1454	8124	1791	1402	1089	27344	
OTHER	836	2036	1489	2562	1734	1757	2004	1412	2180	1363	1381	839	19593	
TOW														
NYLON	31	50	50	108	141	86	56	61	32	31	264	82	992	
POLYESTER	37	564	472	634	7	621	541	113	319	283	544	109	4244	
ACRYLIC	1037	1761	2185	3302	1467	829	1070	899	1013	3056	1394	519	18532	
OTHER	161	16	34	503	9	7	77	13	213	5	217	143	1398	
TOPS	847	964	1224	2191	3092	1230	1557	3000	2448	1206	4015	10818	32592	
SUBTOTAL ABOVE	**24264**	**26661**	**29428**	**34012**	**29461**	**27858**	**26604**	**23500**	**27790**	**24678**	**21527**	**26662**	**322545**	**399100**
WASTE														
NYLON	2127	2118	2159	2883	2102	2007	1852	2750	2640	2829	3296	2831	29594	
POLYESTER	4369	3980	3189	5535	3685	2726	3631	2444	3115	4007	2808	2383	41872	
OTHER	5113	6957	8080	6731	7071	5876	8304	5850	3966	4580	4330	3065	69923	
TOTAL MANUFACTURED FIBERS ABOVE	**69886**	**70757**	**74029**	**88267**	**72375**	**68335**	**73942**	**63469**	**63561**	**67221**	**61050**	**62682**	**835574**	**879703**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	13	51	43	74	9	93	41	77	46	141	69	75	732	
SPUN YARN	0	0	0	0	0	0	0	0	0	0	0	0	0	
SPUN YARNS														
SYNTHETIC *	2886	2861	3471	2446	3534	2388	1896	3793	3429	2758	3476	3140	36078	
ARTIFICIAL *	0	0	0	0	0	0	0	0	0	0	0	0	0	
PUT UP FOR RETAIL SALE	606	740	923	580	532	435	536	704	521	1026	731	651	7985	
GRAND TOTAL ABOVE	**73391**	**74409**	**78466**	**91367**	**76450**	**71251**	**76415**	**68043**	**67557**	**71146**	**65326**	**66548**	**880369**	

SOURCE: U.S. Census Bureau Report EM522

* **Revised.**

Effective January 1,1989 the U.S. Exports are based on the new Harmonized System (HS). On pages 73 through 79 of the ***Fiber Organon***, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

U.S. Monthly Exports of Manufactured Fibers for 1988, are published in the ***Textile Organon***, February 1989 issue, on page 33.

TABLE 9:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1989 REVISED												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989	1988
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	0	0	6	1	4	0	139	0	37	112	134	77	510	
BRAZIL	53	136	55	26	54	102	22	66	53	53	0	53	673	
CANADA	745	620	689	616	659	540	406	637	543	757	637	408	7257	
CHILE	44	22	22	22	22	44	48	0	44	0	0	44	312	
GERMANY, FED. REP. OF	794	530	707	466	451	387	536	931	797	985	1427	271	8282	
IRELAND	37	0	36	138	34	36	107	69	104	0	70	35	666	
JAPAN	56	121	124	185	125	223	74	91	72	42	78	34	1225	
KOREA, REP. OF	66	22	0	56	0	22	11	3	0	14	0	0	194	
MEXICO	156	99	171	45	153	144	213	141	169	124	122	80	1617	
NETHERLANDS	61	239	261	173	204	380	262	419	345	382	292	301	3319	
UNITED KINGDOM	99	68	113	135	75	66	120	40	105	100	122	31	1074	
ALL OTHER COUNTRIES [a]	46	29	37	15	176	71	371	87	237	21	17	22	1129	
TOTAL ARTIFICIAL YARN *	**2157**	**1886**	**2221**	**1878**	**1957**	**2015**	**2309**	**2484**	**2506**	**2590**	**2899**	**1356**	**26258**	**17641**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	323	422	377	226	381	430	394	568	39	482	206	406	4254	
CANADA	4757	1980	4093	3462	3409	2370	1638	4140	3000	3512	3766	2643	38780	
CHINA, PRC	104	0	369	0	752	0	110	0	0	0	111	0	1446	
GERMANY, DEM. REP.	0	0	95	43	82	80	44	0	0	0	0	0	344	
GERMANY, FED. REP. OF	68	67	95	116	124	142	208	179	236	183	126	47	1591	
JAPAN	150	521	422	263	107	60	84	61	174	147	139	45	2173	
SWITZERLAND	9	25	41	37	65	40	286	7	14	37	32	22	615	
TAIWAN	28	0	28	88	320	0	264	176	0	176	183	179	1442	
UNITED KINGDOM	265	225	1	47	69	42	67	135	130	190	45	87	1303	
ALL OTHER COUNTRIES [b]	273	241	123	138	111	255	42	261	126	239	131	107	2047	
TOTAL ARTIFICIAL STAPLE+TOW	**5977**	**3491**	**5644**	**4420**	**5420**	**3419**	**3137**	**5527**	**3719**	**4966**	**4739**	**3536**	**53995**	**20401**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	30	46	0	11	38	1479	1	959	774	0	14	3352	
BELGIUM	0	56	115	171	343	236	568	685	399	323	492	1022	4410	
BRAZIL	106	63	170	30	140	201	57	191	92	114	49	49	1262	
CANADA	3437	2926	2969	2399	3327	3304	2445	3580	3717	3978	3167	2650	37899	
COSTA RICA	252	487	591	433	415	517	537	515	657	541	319	621	5885	
ECUADOR	91	26	144	0	58	23	71	33	33	36	117	0	632	
FRANCE	1180	1151	1079	1159	1159	1085	972	799	516	1432	794	1064	12390	
GERMANY, FED. REP. OF	2231	2204	2641	2514	2357	3691	2202	1988	2515	1844	2492	1661	28340	
ISRAEL	299	217	172	149	285	244	117	124	103	98	91	151	2050	
ITALY	924	323	873	859	1031	132	489	526	620	568	546	573	7464	
JAPAN	469	610	568	609	548	502	845	1110	960	1304	1084	811	9420	
KOREA, REP. OF	10	49	7	81	98	42	89	0	59	17	97	0	549	
MEXICO	1447	2222	2385	1857	2527	2911	2490	2806	2210	1691	1060	1130	24736	
NETHERLANDS	68	193	267	338	69	63	398	104	7	381	38	4	1930	
SINGAPORE	0	25	0	33	0	33	16	16	16	0	30	0	169	
TAIWAN	50	175	650	1296	2844	3217	3133	2680	1259	1138	1183	368	17993	
THAILAND	65	64	69	67	63	171	124	142	70	96	95	76	1102	
UNITED KINGDOM	1482	1357	1409	1649	1790	1506	1635	2014	1437	2234	1841	1631	19985	
ALL OTHER COUNTRIES [c]	36	175	221	260	67	330	189	324	443	196	310	126	2677	
TOTAL SYNTHETIC YARN	**12147**	**12353**	**14376**	**13904**	**17132**	**18246**	**17856**	**17638**	**16072**	**16765**	**13805**	**11951**	**182245**	**116278**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	3	9	13	1	0	79	0	11	2	57	14	189	
AUSTRALIA	31	160	1	82	16	43	149	78	0	134	24	54	772	
BELGIUM	47	99	60	56	67	7	7	378	35	368	16	203	1343	
CANADA	1413	737	1481	1489	1292	874	622	818	1242	1417	2143	2111	15639	
FRANCE	230	304	253	405	388	336	136	519	102	573	416	428	4090	
GERMANY, FED. REP. OF	1985	1758	1318	1293	1491	1780	1084	2057	753	1440	1287	811	17057	
INDIA	0	0	3772	3400	709	49	1772	2893	3690	992	0	36	17313	
IRELAND	280	480	305	348	0	36	0	0	0	0	39	0	1488	
ITALY	482	394	206	46	61	34	70	193	264	217	217	358	2542	
JAPAN	1773	1757	2303	2770	2429	1826	1929	2894	1648	2554	2166	2146	26195	
KOREA, REP. OF	2297	3387	3933	4165	5687	4876	4806	2638	3190	4035	1270	2960	43244	
MEXICO	1049	372	420	1016	783	462	579	797	434	464	1599	3097	11072	
NETHERLANDS	31	103	99	81	56	105	21	617	365	44	3	10	1535	
SPAIN	8	0	178	39	65	128	0	0	0	34	0	12	464	
SWITZERLAND	146	165	134	166	125	42	242	214	88	128	305	88	1843	
TAIWAN	262	235	215	808	917	2057	2093	1994	4020	3424	6973	3024	26022	
TURKEY	18	0	0	0	111	37	90	105	0	269	162	74	866	
UNITED KINGDOM	2318	2304	1643	2107	2671	1229	1645	810	1535	1139	1100	1162	19663	
ALL OTHER COUNTRIES [d]	2	53	45	56	29	28	0	241	111	42	205	268	1080	
TOTAL SYNTHETIC STAPLE+TOW	**12372**	**12311**	**16375**	**18340**	**16898**	**13949**	**15324**	**17246**	**17488**	**17276**	**17982**	**16856**	**192417**	**196154**

* Revised

a. Belgium 617, Italy 153, France 110, Taiwan 68, China, PRC 51, Greece 41, Norway 32, Singapore 23, Egypt 21, Thailand 10, India 2, Uruguay 1.

b. Poland 436, Finland 274, Australia 217, Italy 194, Romania 175, Korea, Rep. of 171, France 148, Sweden 131, Belgium 73, Spain 47, Chile 46, Norway 40, Peru 37, Netherlands 28, India 18, Thailand 11, Mexico 1.

c. Ireland 851, Portugal 342, Egypt 258, Turkey 201, Peru 182, Austria 124, Spain 92, Switzerland 92, Romania 86, China, PRC 82, El Salvador 80, Australia 51, Colombia 41, Morocco 37, Nigeria 35, Sweden 32, Hong Kong 31, Honduras 20, Greece 11, Yugoslavia 11, Denmark 9, Finland 6, Haiti 2, Norway 1.

d. Romania 243, Indonesia 176, Venezuela 176, Israel 169, Brazil 132, Hong Kong 92, Malaysia 44, Germany, Dem. Rep. 42, Thailand 3, China, PRC 2, Peru 1.

Effective January 1, 1989 the U.S. Manufactured Imports for Consumption by Country of Origin are based on the new Harmonized System (HS). On pages 73 through 79 of the *Fiber Organon*, April 1989 issue, we present the Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.**

Selected U.S. Manufactured Imports for Consumption by Country of Origin for 1988 are published in the ***Textile Organon***, February 1989 issue, page 31.

TABLE 10:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3											70	0
BRAZIL	26	53											79	189
CANADA	628	303											931	1365
CHILE	0	309											309	66
GERMANY, FED. REP. OF	422	516											938	1324
IRELAND	145	0											145	37
JAPAN	104	72											176	177
KOREA, REP. OF	0	22											22	88
MEXICO	102	4											106	255
NETHERLANDS	282	264											546	300
UNITED KINGDOM	34	22											56	167
ALL OTHER COUNTRIES [a]	21	56											77	75
TOTAL ARTIFICIAL YARN	**1831**	**1624**											**3455**	**4043**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493											812	745
CANADA	4973	3854											8827	6747
CHINA, PRC	0	0											0	104
GERMANY, DEM. REP	0	0											0	0
GERMANY, FED. REP. OF	89	134											223	135
JAPAN	143	204											347	671
SWITZERLAND	0	27											27	34
TAIWAN	354	988											1342	28
UNITED KINGDOM	89	93											182	490
ALL OTHER COUNTRIES [b]	337	301											638	514
TOTAL ARTIFICIAL STAPLE+TOW	**6304**	**6094**											**12398**	**9468**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0											0	30
BELGIUM	776	122											898	56
BRAZIL	70	71											141	169
CANADA	3834	2895											6729	6363
COSTA RICA	762	517											1279	739
ECUADOR	53	16											69	117
FRANCE	2007	1305											3312	2331
GERMANY, FED. REP. OF	2096	2021											4117	4435
ISRAEL	0	0											0	516
ITALY	892	434											1326	1247
JAPAN	760	658											1418	1079
KOREA, REP. OF	31	0											31	59
MEXICO	1393	900											2293	3669
NETHERLANDS	103	305											408	261
SINGAPORE	16	16											32	25
TAIWAN	791	227											1018	225
THAILAND	58	93											151	129
UNITED KINGDOM	1881	1492											3373	2839
ALL OTHER COUNTRIES [c]	413	319											732	211
TOTAL SYNTHETIC YARN	**15936**	**11391**											**27327**	**24500**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53											53	3
AUSTRALIA	38	120											158	191
BELGIUM	1	16											17	146
CANADA	3703	2439											6142	2150
FRANCE	592	297											889	534
GERMANY, FED. REP. OF	1017	1236											2253	3743
INDIA	1731	1055											2786	0
IRELAND	0	26											26	760
ITALY	422	318											740	876
JAPAN	1754	1763											3517	3530
KOREA, REP. OF	1786	1273											3059	5684
MEXICO	3590	2041											5631	1421
NETHERLANDS	1	0											1	134
SPAIN	35	0											35	8
SWITZERLAND	399	124											523	311
TAIWAN	888	572											1460	497
TURKEY	112	114											226	18
UNITED KINGDOM	2249	1868											4117	4622
ALL OTHER COUNTRIES [d]	549	326											875	55
TOTAL SYNTHETIC STAPLE+TOW	**18867**	**13641**											**32508**	**24683**

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[a] Ecuador 33, Italy 14, Belgium 12, France 10, Taiwan 2, Thailand 2, Uruguay 2, Hong Kong 1, India 1

[b] Poland 295, Sweden 189, Thailand 66, Finland 39, France 28, Netherlands 19, Italy 2

[c] Portugal 296, Spain 116, Paraguay 83, Turkey 51, Ireland 39, El Salvador 33, Hong Kong 31, Morocco 23, Finland 21, Sweden 11, Switzerland 10, Yugoslavia 8, Austria 6, Haiti 3, Greece 1

[d] Venezuela 395, Thailand 209, Sweden 180, Poland 47, Malaysia 44

TABLE 11:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

	1990												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208											450	380
TEXTURED	54	8											62	181
OTHER	1385	1371											2756	3346
MONOFILAMENTS & STRIPS	150	37											187	136
SUBTOTAL ABOVE	**1831**	**1624**											**3455**	**4043**
STAPLE	5989	5884											11873	9405
TOW	312	210											522	47
TOPS	3	0											3	16
SUBTOTAL ABOVE	**6304**	**6094**											**12398**	**9468**
WASTE	0	0											0	140
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856											2291	2130
TEXTURED														
UP TO 450 DENIER	270	333											603	602
OVER 450 DENIER	2936	1350											4286	2365
OTHER	4531	3817											8348	7126
MONOFILAMENTS & STRIPS	216	117											333	231
SUBTOTAL ABOVE	**9388**	**6473**											**15861**	**12454**
POLYESTER														
HIGH TENACITY	614	408											1022	1537
TEXTURED	785	643											1428	2556
POY	719	119											838	40
OTHER	2038	1457											3495	2633
MONOFILAMENTS & STRIPS	53	0											53	145
SUBTOTAL ABOVE	**4209**	**2627**											**6836**	**6911**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408											2859	3742
OTHER	277	223											500	647
MONOFILAMENTS & STRIPS	611	660											1271	446
SUBTOTAL ABOVE	**2339**	**2291**											**4630**	**4835**
STAPLE														
NYLON	4048	3037											7085	3622
POLYESTER	9261	5813											15074	11178
ACRYLIC	1711	1729											3440	2962
POLYPROPYLENE	543	37											580	99
OTHER	196	190											386	1212
TOW														
NYLON	409	308											717	670
POLYESTER	15	70											85	125
ACRYLIC	2512	1973											4485	3732
OTHER	70	5											75	237
TOPS	102	479											581	846
SUBTOTAL ABOVE	**18867**	**13641**											**32508**	**24683**
WASTE														
NYLON	2694	2074											4768	3775
POLYESTER	2703	2241											4944	1339
OTHER	444	571											1015	1121
TOTAL MANUFACTURED FIBERS ABOVE	**48779**	**37636**											**86415**	**66769**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59											174	313
SPUN YARN	427	503											930	888
SPUN YARNS														
SYNTHETIC	2420	2155											4575	9390
ARTIFICIAL	0	0											0	0
PUT UP FOR RETAIL SALE	32	24											56	121
GRAND TOTAL ABOVE	**51773**	**40377**											**92150**	**79481**

SOURCE: U.S. Census Bureau Report IM145X

TABLE 12:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37											129	22
TEXTURED	217	9											226	480
OTHER	101	106											207	757
MONOFILAMENTS & STRIPS	97	0											97	90
SUBTOTAL ABOVE	**507**	**152**											**659**	**1349**
STAPLE	1195	2051											3246	4613
TOPS	333	0											333	94
SUBTOTAL ABOVE	**1528**	**2051**											**3579**	**4707**
WASTE	**330**	**407**											**737**	**1862**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357											15114	18741
TEXTURED														
UP TO 450 DENIER	1571	588											2159	1108
OVER 450 DENIER	5636	4353											9989	9757
OTHER	2637	2264											4901	4141
MONOFILAMENTS & STRIPS	8	32											40	497
SUBTOTAL ABOVE	**17609**	**14594**											**32203**	**34244**
POLYESTER														
HIGH TENACITY	4308	5166											9474	6153
TEXTURED	3074	3021											6095	7328
POY	1831	2368											4199	2189
OTHER	1297	1746											3043	1591
MONOFILAMENTS & STRIPS	185	285											470	421
SUBTOTAL ABOVE	**10695**	**12586**											**23281**	**17682**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523											1058	1490
OTHER	2035	2007											4042	2813
MONOFILAMENTS & STRIPS	876	913											1789	907
SUBTOTAL ABOVE	**3446**	**3443**											**6889**	**5210**
STAPLE														
NYLON	3163	2765											5928	5870
POLYESTER	7157	6405											13562	24810
ACRYLIC	4584	3178											7762	9000
POLYPROPYLENE	2038	1561											3599	2905
OTHER	2688	923											3611	2872
TOW														
NYLON	121	176											297	81
POLYESTER	18	64											82	601
ACRYLIC	1710	1787											3497	2798
OTHER	26	12											38	177
TOPS	3984	2729											6713	1811
SUBTOTAL ABOVE	**25489**	**19600**											**45089**	**50925**
WASTE														
NYLON	4117	4250											8367	4245
POLYESTER	3268	2845											6113	8349
OTHER	3343	3700											7043	12070
TOTAL MANUFACTURED FIBERS ABOVE	**70332**	**63628**											**133960**	**140643**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	2769	45											2814	64
SPUN YARN	235	0											235	0
SPUN YARNS														
SYNTHETIC	3007	4304											7311	5747
ARTIFICIAL	0	0											0	0
PUT UP FOR RETAIL SALE	287	398											685	1346
GRAND TOTAL ABOVE	**76630**	**68375**											**145005**	**147800**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 13:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

	1990												YEAR TO DATE[a]	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b,c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4										47.9	52.8
RAYON STAPLE	30.1	25.3	26.3										81.7	103.1
TOTAL ARTIFICIAL (CELLULOSIC)	45.2	40.7	43.7										129.6	155.9
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4										83.6	94.4
- CARPET	86.5	81.1	82.2										249.8	234.1
- TEXTILE[f]	28.8	28.1	29.9										86.8	102.1
POLYESTER - INDUSTRIAL[d]	27.2	28.5	32.0										87.7	89.2
- TEXTILE[f]	56.6	56.2	58.0										170.8	218.8
OLEFIN[e]	105.8	115.0	114.9										335.7	313.2
TOTAL YARN	329.8	339.2	345.4										1014.4	1051.8
STAPLE+TOW+FIBERFILL														
NYLON	88.9	74.9	86.1										249.9	249.5
ACRYLIC+MODACRYLIC	40.3	39.6	43.1										123.0	136.5
POLYESTER	168.6	175.4	173.2										517.2	610.3
OLEFIN	30.3	34.5	35.4										100.2	94.7
TOTAL STAPLE	328.1	324.4	337.8										990.3	1091.0
TOTAL SYNTHETIC (NONCELLULOSIC)	657.9	663.6	683.2										2004.7	2142.8
TOTAL MANUFACTURED FIBER	703.1	704.3	726.9										2134.3	2298.7
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8										8.8	11.3
RAYON STAPLE	20.2	17.2	14.0										14.0	11.7
TOTAL ARTIFICIAL (CELLULOSIC)	29.9	27.1	22.8										22.8	23.0
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4										33.4	22.4
- CARPET	60.5	61.2	62.6										62.6	62.8
- TEXTILE[f]	57.0	59.9	63.9										63.9	46.4
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5										39.5	30.6
- TEXTILE[f]	94.5	104.9	109.9										109.9	81.8
OLEFIN[e]	68.1	66.6	65.9										65.9	58.0
TOTAL YARN	356.2	366.9	375.2										375.2	302.0
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1										37.1	51.0
ACRYLIC+MODACRYLIC	69.5	70.9	72.8										72.8	69.0
POLYESTER	193.5	195.1	192.9										192.9	158.5
OLEFIN	34.6	33.4	31.5										31.5	32.8
TOTAL STAPLE	337.7	339.9	334.3										334.3	311.3
TOTAL SYNTHETIC (NONCELLULOSIC)	693.9	706.8	709.5										709.5	613.3
TOTAL MANUFACTURED FIBER	723.8	733.9	732.3										732.3	636.3
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL														
CARPET CLASS WOOL														
TOTAL RAW WOOL[g]														
RAW COTTON	317.3	325.5											642.8	602.7

a. "Year to date" totals for stock, are the latest month's figures.
b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.
c. Producers' total domestic shipments plus export shipments.
d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.
e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.
f. Includes low denier industrial yarn.
g. **Wool data for 1990 available on a quarterly basis only.**

C3460-1

FIBER ORGANON

Volume 61, No. 5 May 1990 A publication of *Fiber Economics Bureau, Inc.*

Highlights

- 1989 Per Capita Consumption Review... begins on page 87.
- May 1990 Capacity Survey Analysis... begins on page 92.
- Canadian Mill Consumption... begins on page 95.

SHIPMENTS:

In April, total manufactured fiber shipments reached 748 million pounds, 3% above the 726 million pounds shipped in March and 5% below the 783 million pounds shipped in April 1989.

April shipments of synthetic (noncellulosic) filament yarn rose 5% to 361 million pounds and staple+tow rose 1% to 341 million pounds.

Contributing to the increase in shipments over the previous month were polyester textile yarn up 20% or 12 million pounds, nylon textile yarn up 7% or 2 million pounds and polyester staple+tow, up 8 million pounds or 5%.

Year-to-date domestic shipments of manufactured fiber are down 6% and exports are down 14%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1990 APR	1990 MAR	% CHG 4/90 - 3/90	1989 APR	% CHG 4/90 - 4/89	YEAR TO DATE 1990	YEAR TO DATE 1989	% CHG YTD 1990 - 1989
ARTIFICIAL (CELLULOSIC)								
YARN	18.1	17.4	*+4.0*	21.5	*-15.8*	66.0	74.3	*-11.2*
RAYON STAPLE	28.2	26.3	*+7.2*	31.4	*-10.2*	109.9	134.5	*-18.3*
TOTAL ARTIFICIAL (CELL.)	**46.3**	**43.7**	***+5.9***	**52.9**	***-12.5***	**175.9**	**208.8**	***-15.8***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	28.4	28.4	*- -*	32.3	*-12.1*	112.0	126.7	*-11.6*
- CARPET	85.4	82.2	*+3.9*	77.5	*+10.2*	335.2	311.6	*+7.6*
- TEXTILE[a]	32.0	29.9	*+7.0*	34.6	*-7.5*	119.0	136.7	*-12.9*
POLYESTER - INDUSTRIAL	32.6	31.8	*+2.5*	32.2	*+1.2*	120.2	121.4	*-1.0*
- TEXTILE[a]	69.8	58.0	*+20.3*	78.2	*-10.7*	240.6	297.0	*-19.0*
OLEFIN	112.3	114.1	*-1.6*	104.1	*+7.9*	444.8	417.3	*+6.6*
TOTAL YARN	**360.5**	**344.4**	***+4.7***	**358.9**	***+0.4***	**1371.8**	**1410.7**	***-2.8***
STAPLE+TOW+FIBERFILL								
NYLON	85.0	86.0	*-1.2*	76.4	*+11.3*	334.7	325.9	*+2.7*
ACRYLIC+MODACRYLIC	39.7	43.2	*-8.1*	49.2	*-19.3*	163.0	185.7	*-12.2*
POLYESTER	181.7	173.2	*+4.9*	214.3	*-15.2*	699.5	824.6	*-15.2*
OLEFIN	34.5	35.3	*-2.3*	31.4	*+9.9*	134.5	126.1	*+6.7*
TOTAL STAPLE	**340.9**	**337.7**	***+0.9***	**371.3**	***-8.2***	**1331.7**	**1462.3**	***-8.9***
TOTAL SYNTHETIC (NONCELL.)	**701.4**	**682.1**	***+2.8***	**730.2**	***-3.9***	**2703.5**	**2873.0**	***-5.9***
TOTAL MANUFACTURED FIBER	**747.7**	**725.8**	***+3.0***	**783.1**	***-4.5***	**2879.4**	**3081.8**	***-6.6***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS[b]	708.0	684.3	*+3.5*	739.2	*-4.2*	2726.3	2903.0	*-6.1*
EXPORTS[c]	39.7	41.5	*-4.3*	43.9	*-9.6*	153.1	178.8	*-14.4*

[a] Includes low denier industrial yarn

[b] Includes olefin exports.

[c] Excludes olefin exports.

Fiber Organon

A Monthly Review

May 1990

FIBER ECONOMICS BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc
101 Eisenhower Parkway
Roseland NJ 07068
U S A
Telephone (201) 228-1107
Facsimile (201) 228-7598

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CONTENTS

Features

1989 Per Capita Consumption Review 87 - 91
  Graph 1: Per Capita Consumption 87
  Graph 2: Comparison of Population, GNP and Per Capita Consumption 88
  U.S. Population, Gross National Product and Per Capita GNP 89
  U.S. Total Fiber Consumption 89
  U.S. Per Capita Fiber Consumption 89
  Mill Consumption by Fiber 90
  Percent Analysis of Population, Per Capita GNP and Per Capita Consumption of Manufactured Fiber, Cotton, Wool & Other Fibers 90
  Per Capita Consumption of Imports of Manufactured Fiber, Cotton & Wool Manufactures Compared with Per Capita Consumption of Fibers 91

May 1990 Capacity Survey Analysis 92 - 94
  Graph 3: Manufactured Fiber Industry Production and Producing Capacity 92
  U.S. Manufactured Fiber Production and Producing Capacity 93
  Synthetic (Noncellulosic) Fiber Capacity Detail 94

Canadian Mill Consumption 95 - 98
  Canadian Mill Consumption of Fiber 95
  Canadian Per Capita Fiber Consumption 95
  Canadian Mill Consumption of Fiber and Domestic Consumption of Products 96 - 97
  Canadian Mill Consumption of Manufactured Fiber, Cotton & Wool 98

Industry Regulars

Total U.S. Manufactured Fiber Shipments 85

Monthly U.S. Manufactured Fiber Data 99 - 101
  Imports by Country of Origin 99
  Imports by Fiber 100
  Exports by Fiber 101

Quarterly Manufactured Fiber Data 102 - 103
  Filament Yarn Domestic Shipments 102
  Staple+Tow Domestic Shipments 103

Selected U.S. Monthly Fiber Data 104

1989 PER CAPITA CONSUMPTION REVIEW

Per capita consumption of all fibers rose to 67.9 pounds in 1989, 3.0% above the 65.9 pounds recorded in 1988.

In 1989, per capita GNP grew 1.9% over 1988, while per capita manufactured fiber consumption fell 1.2%. Cotton per capita consumption increased 13.1%, wool fell 6.7%, and other fibers (silk, linen, jute and sisal & other) fell 9.5%.

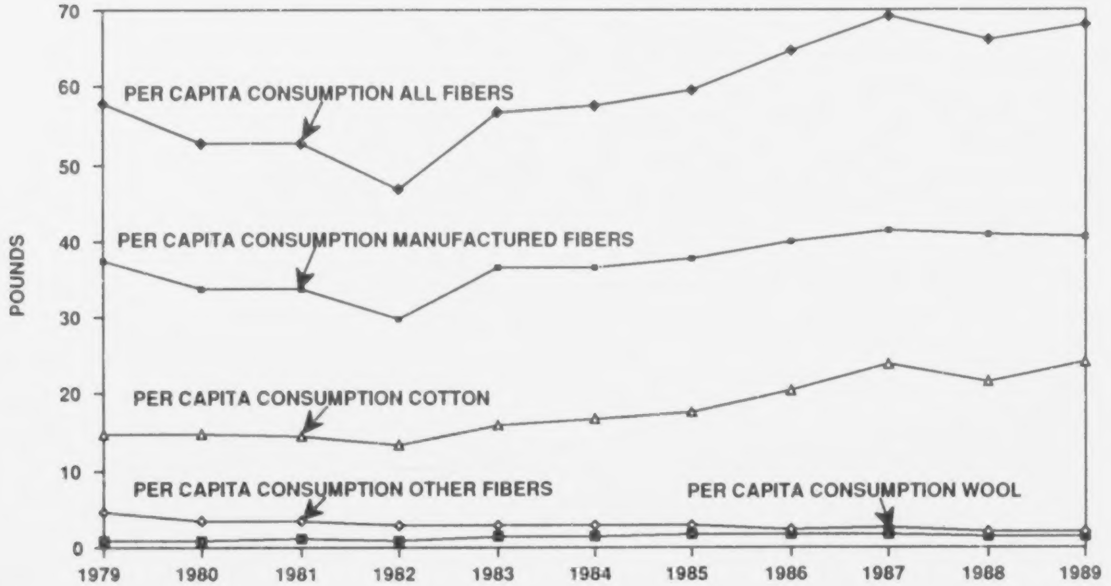
Since 1979, the U.S. population has grown 10.5%. At the same time, the per capita GNP has increased 17.4% (in constant 1982 dollars), while per capita consumption of all fibers rose 17.7%, manufactured fiber per capita consumption increased 7.7%, wool rose 55.6%, and other fibers (silk, linen, jute and sisal & other) fell 57.8%. (See Table 6)

TABLE & GRAPH SUMMARY

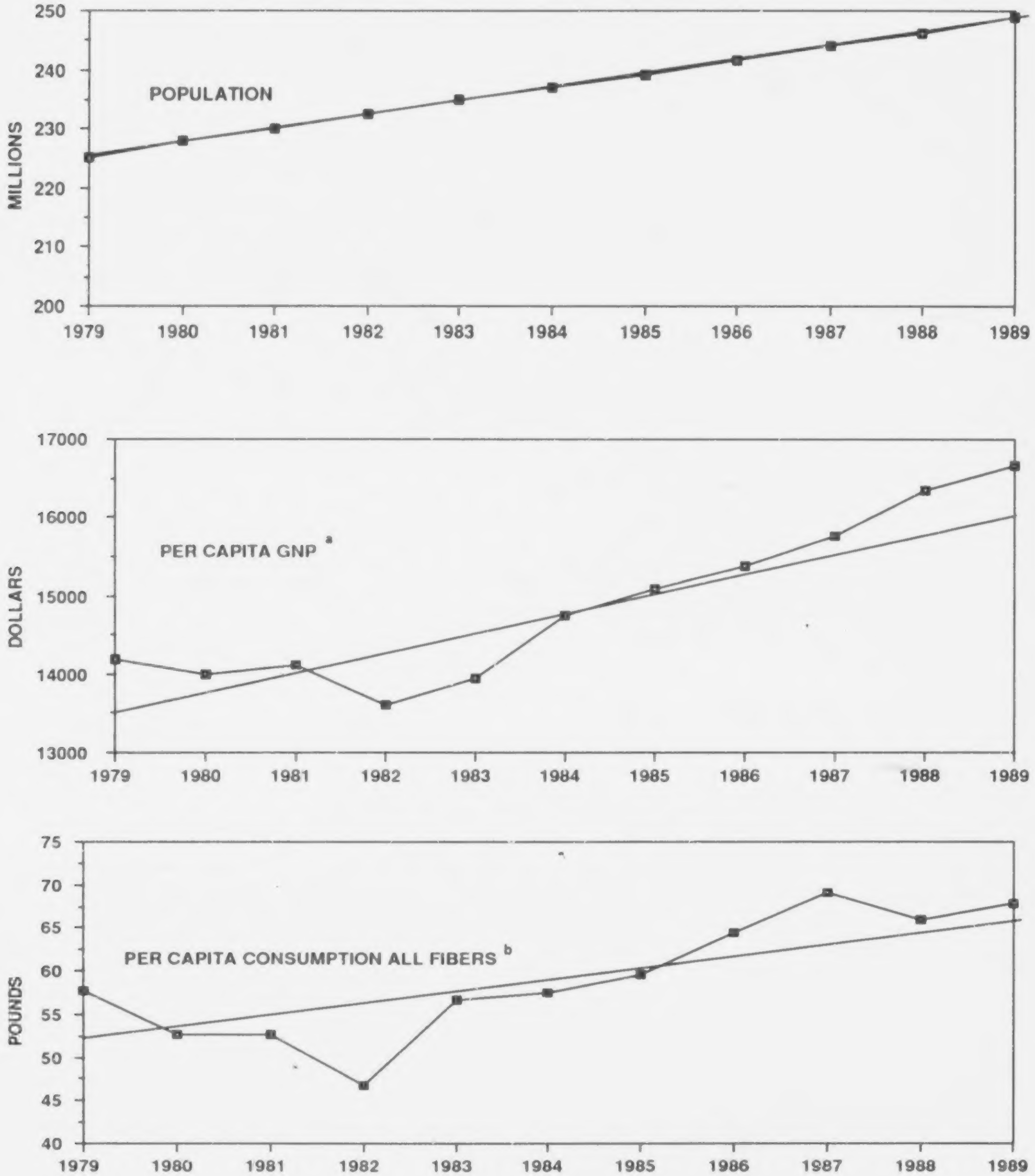
The tables and graphs contained in this review are described as follows:

Table 2:	Per capita GNP derived by dividing the annual Gross National Product data by the population July 1st.
Table 3:	Total U.S. domestic fiber consumption from the April ***Fiber Organon,*** page 73.
Table 4:	Domestic consumption data in Table 3 divided by July 1st population data.
Table 5:	Summary of total mill consumption of all fibers, except glass fiber.
Table 6:	Percent change and relative growth over time of population, per capita GNP and per capita consumption of the various fibers.
Table 7:	Listing of imports in per capita terms and their percentage growth over time for comparison with overall per capita domestic consumption.
Graph 1:	Per capita consumption of all fibers, based on the data in Table 4.
Graph 2:	Growth in the population and trends in per capita GNP and per capita consumption of all fibers, as shown in Tables 2 and 4.

GRAPH 1: PER CAPITA CONSUMPTION



GRAPH 2:
COMPARISON OF POPULATION, GNP & PER CAPITA CONSUMPTION OF ALL FIBERS



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a. In 1982 dollars

b. Data on Glass Fiber are no longer available to prevent company level disclosure The series including Glass Fiber was last published in the May 1985 issue

TABLE 2:
U.S. POPULATION, GROSS NATIONAL PRODUCT & PER CAPITA GROSS NATIONAL PRODUCT

YEAR	POPULATION[a]	GNP[b]	PER CAPITA GNP[c]
1979	225.1	3192.4	14182
1980	227.8	3187.1	13991
1981	230.1	3248.8	14119
1982	232.5	3166.0	13617
1983	234.8	3275.2	13949
1984	237.0	3492.0	14734
1985	239.3	3607.5	15075
1986	241.6	3713.3	15370
1987	243.9	3847.0	15773
1988	246.3	4024.4	16339
1989	248.8	4143.7	16655

SOURCE: ***Current Population Reports***, U.S. Dept. of Commerce Bureau of the Census.
Survey of Current Business, U.S. Dept. of Commerce Bureau of Economic Analysis.

a. In millions. Population data for all years have been changed to that of July 1.
b. In billions of 1982 dollars.
c. In dollars.

TABLE 3:
U.S. TOTAL FIBER CONSUMPTION
MILLION POUNDS

YEAR	MFRD. FIBER[a]	COTTON	WOOL	OTHER FIBERS	TOTAL
1979	8451.8	3334.5	201.0	1021.9	13009.2
1980	7654.8	3352.2	199.1	807.0	12013.1
1981	7722.9	3325.4	234.0	794.7	12077.0
1982	6912.9	3122.7	218.8	648.4	10902.8
1983	8603.2	3711.5	300.7	690.3	13305.7
1984	8644.2	3929.2	361.4	680.1	13614.9
1985	9027.4	4212.0	381.7	646.9	14268.0
1986	9637.6	4937.4	424.1	582.4	15581.5
1987	10075.2	5774.2	404.6	603.5	16857.5
1988	10068.5	5258.7	367.9	511.0	16206.1
1989	10056.4	6017.1	335.9	477.4	16886.8

a. Excludes Glass Fiber. Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the May 1985 issue.

TABLE 4:
U.S. PER CAPITA FIBER CONSUMPTION[a]
POUNDS

PERIOD	POPULATION	PER CAPITA				
		MFRD. FIBER[b]	COTTON	WOOL	OTHER FIBERS	TOTAL
1979	225.1	37.5	14.8	0.9	4.5	57.7
1980	227.8	33.6	14.7	0.9	3.5	52.7
1981	230.1	33.6	14.5	1.0	3.5	52.6
1982	232.5	29.7	13.4	0.9	2.8	46.8
1983	234.8	36.6	15.8	1.3	2.9	56.6
1984	237.0	36.5	16.6	1.5	2.9	57.5
1985	239.3	37.7	17.6	1.6	2.7	59.6
1986	241.6	39.9	20.4	1.8	2.4	64.5
1987	243.9	41.3	23.7	1.7	2.5	69.2
1988	246.3	40.9	21.4	1.5	2.1	65.9
1989	248.8	40.4	24.2	1.4	1.9	67.9

a. Based on total U.S. domestic consumption (mill consumption plus imports less exports of semimanufactured and manufactured products).
b. Excludes Glass Fiber. Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the May 1985 issue.

TABLE 5:
MILL CONSUMPTION BY FIBER
BILLION POUNDS

YEAR	RAYON	ACETATE[a]	NYLON[b]	POLYESTER	ACRYLIC[c]	OLEFIN	COTTON	WOOL	OTHER FIBERS	TOTAL
1979	0.5	0.3	2.7	3.7	0.6	0.7	3.1	0.1	0.2	11.9
1980	0.5	0.3	2.3	3.5	0.6	0.7	3.1	0.1	0.1	11.2
1981	0.5	0.2	2.2	3.5	0.5	0.8	2.7	0.2	0.1	10.7
1982	0.3	0.2	1.9	3.0	0.5	0.8	2.5	0.1	0.1	9.4
1983	0.4	0.2	2.4	3.4	0.5	1.0	2.8	0.2	0.1	11.0
1984	0.4	0.2	2.4	3.2	0.5	1.0	2.7	0.2	0.1	10.7
1985	-	0.5[d]	2.6	3.1	0.5	1.4	2.8	0.1	0.1	11.1
1986		0.6[d]	2.5	3.2	0.6	1.5	3.3	0.2	0.1	12.0
1987		0.6[d]	2.7	3.5	0.5	1.6	3.7	0.2	0.1	12.9
1988		0.6[d]	2.7	3.6	0.5	1.5	3.5	0.2	0.1	12.7
1989		0.6[d]	2.6	3.6	0.5	1.7	3.9	0.2	0.1	13.2

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the May 1985 issue.

a. Includes triacetate. Cigarette tow is excluded.

b. Includes Aramid for all years except 1983-1989.

c. Includes modacrylic.

d. Rayon and acetate combined.

TABLE 6:
PERCENT ANALYSIS OF POPULATION, PER CAPITA GNP AND PER CAPITA CONSUMPTION OF MANUFACTURED FIBER, COTTON, WOOL & OTHER FIBERS

							PER CAPITA CONSUMPTION														
YEAR	POPU-LATION	%[a]	%[b]	PER CAPITA GNP	%[a]	%[b]	MANUFAC. FIBER[c]	%[a]	%[b]	COTTON	%[a]	%[b]	WOOL	%[a]	%[b]	OTHER FIBERS	%[a]	%[b]	ALL FIBERS	%[a]	%[b]
1979	225.1	- -	- -	14182	- -	- -	37.5	- -	- -	14.8	- -	- -	0.9	- -	- -	4.5	- -	- -	57.7	- -	- -
1980	227.8	+1.2	+1.2	13991	-1.3	-1.3	33.6	-10.4	-10.4	14.7	-0.7	-0.7	0.9	- -	- -	3.5	-22.2	-22.2	52.7	-8.7	-8.7
1981	230.1	+1.0	+2.2	14119	+0.9	-0.4	33.6	- -	-10.4	14.5	-1.4	-2.0	1.0	+11.1	+11.1	3.5	- -	-22.2	52.6	-0.2	-8.8
1982	232.5	+1.0	+3.3	13617	-3.6	-4.0	29.7	-11.6	-20.8	13.4	-7.6	-9.5	0.9	-10.0	- -	2.8	-20.0	-37.8	46.8	-11.0	-18.9
1983	234.8	+1.0	+4.3	13949	+2.4	-1.6	36.6	+23.2	-2.4	15.8	+17.9	+6.8	1.3	+44.4	+44.4	2.9	+3.6	-35.6	56.6	+20.9	-1.9
1984	237.0	+0.9	+5.3	14734	+5.6	+3.9	36.5	-0.3	-2.7	16.6	+5.1	+12.2	1.5	+15.4	+66.7	2.9	- -	-35.6	57.5	+1.6	-0.3
1985	239.3	+1.0	+6.3	15075	+2.3	+6.3	37.7	+3.3	+0.5	17.6	+6.0	+18.9	1.6	+6.7	+77.8	2.7	-6.9	-40.0	59.6	+3.7	+3.3
1986	241.6	+1.0	+7.3	15370	+2.0	+8.4	39.9	+5.8	+6.4	20.4	+15.9	+37.8	1.8	+12.5	+100.0	2.4	-11.1	-46.7	64.5	+8.2	+11.8
1987	243.9	+1.0	+8.4	15773	+2.6	+11.2	41.3	+3.5	+10.1	23.7	+16.2	+60.1	1.7	-5.6	+88.9	2.5	+4.2	-44.4	69.2	+7.3	+19.9
1988	246.3	+1.0	+9.4	16339	+3.6	+15.2	40.9	-1.0	+9.1	21.4	-9.7	+44.6	1.5	-11.8	+66.7	2.1	-16.0	-53.3	65.9	-4.8	+14.2
1989	248.8	+1.0	+10.5	16655	+1.9	+17.4	40.4	-1.2	+7.7	24.2	+13.1	+63.5	1.4	-6.7	+55.6	1.9	-9.5	-57.8	67.9	+3.0	+17.7

Population is in millions of people.
Per Capita GNP is 1982 dollars.
All other Per Capita Consumption data are in pounds.
All data are taken from the tables on page 89.

a. Percent change year to year.

b. Percent change since 1979.

c. Excludes Glass Fiber. Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the May 1985 issue.

TABLE 7:
PER CAPITA CONSUMPTION OF IMPORTS OF MANUFACTURED FIBER, COTTON & WOOL MANUFACTURES COMPARED WITH PER CAPITA TOTAL CONSUMPTION OF MANUFACTURED FIBER, COTTON & WOOL

POUNDS & *PERCENT*

	IMPORTS															DOMESTIC FIBER CONSUMPTION					
	MANUFACTURED FIBER					COTTON					WOOL										
YEAR	TOTAL	% [a]	APPAREL	% [a]	% [b]	TOTAL	% [a]	APPAREL	% [a]	% [b]	TOTAL	% [a]	APPAREL	% [a]	% [b]	MANU-FACTURED FIBER [c]	% [a]	COTTON	% [a]	WOOL	% [a]
1980	2.4		1.7		*70.8*	3.6		2.0		*55.6*	0.4		0.2		*50.0*	33.6		14.7		0.9	
1981	2.8	*+16.7*	1.9	*+11.8*	*67.9*	4.2	*+16.7*	2.2	*+10.0*	*52.4*	0.4	--	0.2	--	*50.0*	33.6	--	14.5	*-1.4*	1.0	*+11.1*
1982	3.0	*+7.1*	2.1	*+10.5*	*70.0*	3.9	*-7.1*	2.2	--	*56.4*	0.4	--	0.2	--	*50.0*	29.7	*-11.6*	13.4	*-7.6*	0.9	*-10.0*
1983	4.6	*+53.3*	2.5	*+19.0*	*54.3*	4.8	*+23.1*	2.7	*+22.7*	*56.3*	0.6	*+50.0*	0.3	*+50.0*	*50.0*	36.6	*+23.2*	15.8	*+17.9*	1.3	*+44.4*
1984	5.7	*+23.9*	2.9	*+16.0*	*50.9*	6.2	*+29.2*	3.2	*+18.5*	*51.6*	0.8	*+33.3*	0.3	--	*37.5*	36.5	*-0.3*	16.6	*+5.1*	1.5	*+15.4*
1985	5.8	*+1.8*	3.3	*+13.8*	*56.9*	6.7	*+8.1*	3.7	*+15.6*	*55.2*	1.0	*+25.0*	0.6	*+100.0*	*60.0*	37.7	*+3.3*	17.6	*+6.0*	1.6	*+6.7*
1986	7.0	*+20.7*	3.8	*+15.2*	*54.3*	7.9	*+17.9*	4.2	*+13.5*	*53.2*	1.1	*+10.0*	0.6	--	*54.5*	39.9	*+5.8*	20.4	*+15.9*	1.8	*+12.5*
1987	7.4	*+5.7*	4.2	*+10.5*	*56.8*	9.6	*+21.5*	5.2	*+23.8*	*54.2*	1.1	--	0.7	*+16.7*	*63.6*	41.3	*+3.5*	23.7	*+16.2*	1.7	*-5.6*
1988	7.0	*-5.4*	4.0	*-4.8*	*57.1*	8.6	*-10.4*	5.1	*-1.9*	*59.3*	1.0	*-9.1*	0.6	*-14.3*	*60.0*	40.9	*-1.0*	21.4	*-9.7*	1.5	*-11.8*
1989	7.3	*+4.3*	4.2	*+5.0*	*57.5*	9.8	*+14.0*	5.8	*+13.7*	*59.2*	0.9	*-10.0*	0.6	--	*66.7*	40.4	*-1.2*	24.2	*+13.1*	1.4	*-6.7*

a. Percent change from previous year.

b. Apparel as percent of total imports of semimanufactured and manufactured products.

c. Excludes Glass Fiber. Data on Glass Fiber is no longer available due to company disclosure. The series including Glass Fiber was last published in the May 1985 issue.

MAY 1990 CAPACITY SURVEY ANALYSIS

U.S. Manufactured Fiber Capacity Utilization at 84%

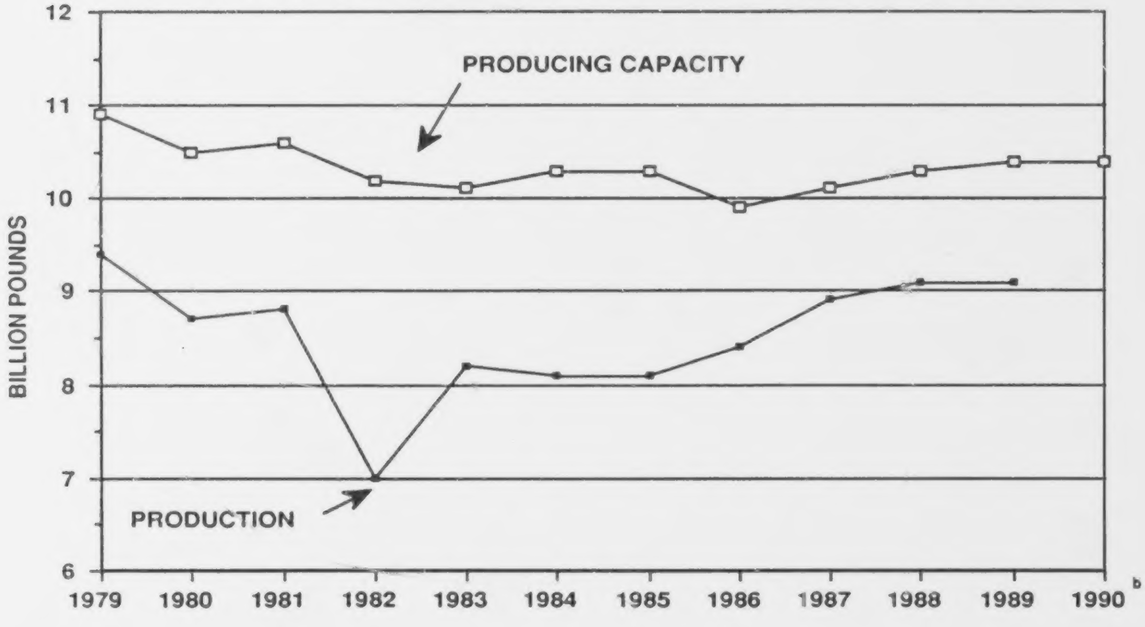
Based on yearly January - April production data and May 1990 Capacity Survey results, the capacity utilization rate for the U.S. manufactured fiber industry stood at 84% as compared to 87% in 1989 (Graph 3).

Total industry capacity (excluding glass fiber) rose to 10,437 million pounds, slightly above the 10,397 million pounds recorded in the November 1989 Survey.

Since November 1989, the synthetic (noncellulosic) filament yarn capacity rose from 4,918 million pounds to 5,031 million pounds, with a 2% gain in nylon carpet yarn.

In 1990, capacity for synthetic (noncellulosic) staple+tow increased 2% to 4,864 million pounds, the highest level since November 1986, when capacity stood at 4,662 million pounds (Table 9). A major increase was shown in polyester staple+tow where the capacity rose from 2,464 million pounds in November 1989 to 2,569 million pounds in May 1990.

GRAPH 3:
MANUFACTURED FIBER INDUSTRY PRODUCTION & PRODUCING CAPACITY [a]



a. Artifical (Cellulosic) and Synthetic (Noncellulosic) fiber excluding glass fiber.
b. Based on May 1990 capacity survey.

TABLE 8:
U.S. MANUFACTURED FIBER PRODUCTION & PRODUCING CAPACITY
MILLION POUNDS

	ARTIFICIAL (CELLULOSIC) FIBERS							SYNTHETIC (NONCELLULOSIC) FIBERS [a]			GRAND TOTAL MANUFACTURED FIBERS EXCLUDING GLASS FIBER			NON-ADD GLASS FIBER [d]
	FILAMENT YARN+MONOFIL			STAPLE+TOW										
PERIOD	RAYON	ACETATE [b]	TOTAL	RAYON	ACETATE [b]	TOTAL	TOTAL	YARN +MONO	STAPLE +TOW	TOTAL	YARN +MONO [c]	STAPLE +TOW	TOTAL	
ACTUAL ANNUAL PRODUCTION														
1977	71	282	353	527	8	535	888	3674	3654	7328	4027	4189	8216	787
1978	62	301	363	535	7	542	905	3830	3953	7783	4193	4495	8688	923
1979	57	317	374	549	7	556	930	4155	4282	8437	4529	4838	9367	1014
1980	47	309	356	443	7	450	806	3744	4148	7892	4100	4598	8698	867
1981	48	257	305	461	4	465	770	3815	4191	8006	4120	4656	8776	1041
1982	33	195	228	355	1	356	584	3057	3403	6460	3285	3759	7044	899
1983	36	228	264	375	1	376	640	3568	3970	7538	3832	4346	8178	1169
1984	41	198	239	389	+	389	628	3525	3947	7472	3764	4336	8100	1394
1985			205 g			353 g	558	3790	3773	7563	3995	4126	8121	NA
1986			215 g			404 g	619	3836	3992	7828	4051	4396	8447	NA
1987			191 g			414 g	605	4010	4306	8316	4201	4720	8921	NA
1988			214 g			400 g	614	4180	4346	8526	4394	4746	9140	NA
1989			218 g			363 g	581	4225	4290	8515	4443	4653	9096	NA
ACTUAL & PROJECTED CAPACITY, ANNUAL RATE, AS OF -														
NOV 1977 e	85	315	400	655	8	663	1063	4958	4394	9352	5358	5057	10415	1002
NOV 1978 e	83	330	413	665	8	673	1086	4984	4571	9555	5397	5244	10641	1118
NOV 1979 e	75	355	430	671	8	679	1109	5106	4678	9784	5536	5357	10893	1305
NOV 1980 e	63	324	387	514	8	522	909	4913	4714	9627	5300	5236	10536	1473
NOV 1981 e	52	332	384	509	5	514	898	4746	4950	9696	5130	5464	10594	1561
NOV 1982 e	63	318	381	510	4	514	895	4553	4781	9334	4934	5295	10229	1718
NOV 1983 e	63	268	331	510	4	514	845	4447	4827	9274	4778	5341	10119	1618
NOV 1984 e	63	268	331	510	4	514	845	4479	4981	9460	4810	5495	10305	1743
NOV 1985 e			269 g	510	5	515	784	4668	4890	9558	4937	5405	10342	1769
NOV 1986 e			244 g			465 g	709	4545	4662	9207	4789	5127	9916	1763
NOV 1987 e			244 g			465 g	709	4557	4793	9350	4801	5258	10059	1642
NOV 1988 e			244 g			469 g	713	4743	4849	9592	4987	5318	10305	1729
NOV 1989 e			232 g			492 g	724	4918	4755	9673	5150	5247	10397	1822
MAY 1990 e			219 g			323 g	542	5031	4864	9895	5250	5187	10437	1867
NOV 1990 f			219 g			323 g	542	5238	4929	10167	5457	5252	10709	1894
MAY 1991 f			219 g			323 g	542	5334	5036	10370	5553	5359	10912	1910
NOV 1991 f			219 g			323 g	542	5412	5126	10538	5631	5449	11080	1981
MAY 1992 f			219 g			323 g	542	5472	5153	10625	5691	5476	11167	2052

NA No longer available.

a. Included are those listed in the November ***Fiber Organon*** issue, with the exception of Aramid fiber as of November 1983. Yarn+mono includes olefin film fiber and spunbonded polypropylene. Staple+tow includes fiberfill.

b. Data include diacetate and triacetate. The acetate staple+tow data do not include the large quantities for cigarette filtration.

c. Grand Total Yarn means the yarn+mono shown, excluding glass fiber.

d. Glass fiber, all types.

e. Actual producing capacity as of the date shown.

f. Future producing capacity planned for certain dates as of NOV 1990.

g. Detail withheld due to disclosure of company data.

TABLE 9:
SYNTHETIC (NONCELLULOSIC) FIBER CAPACITY DETAIL

MILLION POUNDS & *AVERAGE DENIER*

	FILAMENT YARN, MONOFIL & OLEFIN FILM FIBER											STAPLE, TOW & FIBERFILL					SYNTHETIC (NONCELLULOSIC) TOTAL
	NYLON+ARAMID				POLYESTER			OLEFIN a									
			TEXTILE			TEXTILE											
PERIOD	IND	CARP	LBS	DEN	IND	LBS	DEN	YARN	MONO b	FILM b	TOTAL	NYLON + ARAMID	ACRYL +MOD ACRYL	POLY-ESTER	OLEFIN + VINYON e	TOTAL	
NOV 1977 c	523	829	558	*55*	443	1698	*126*	173	336	398	4958	939	869	2470	116	4394	9352
NOV 1978 c	510	908	565	*53*	443	1643	*116*	174	347	394	4984	1023	865	2554	129	4571	9555
NOV 1979 c	513	950	579	*51*	443	1699	*114*	172	342	408	5106	1020	839	2673	146	4678	9784
NOV 1980 c	515	910	551	*52*	400	1637	*113*	120	350	430	4913	991	830	2759	134	4714	9627
NOV 1981 c	514	893	553	*49*	316	1481	*114*	178	356	455	4746	1010	835	2839	266	4950	9696
NOV 1982 c	474	925	513	*53*	338	1265	*119*	209	369	460	4553	978	832	2700	271	4781	9334
NOV 1983 c	440	907	494	*52*	337	1170	*122*	240	375	484	4447	1017	826	2704	280	4827	9274
NOV 1984 c	437	926	470	*57*	342	1162	*121*	270	386	486	4479	1054	807	2784	336	4981	9460
NOV 1985 c	437	965	466	*53*	374	1097	*126*	304	412	613	4668	1067	631	2785	407	4890	9558
NOV 1986 c	435	964	398	*51*	401	1021	*123*	286	407	633	4545	1077	637	2491	457	4662	9207
NOV 1987 c	418	1005	404	*49*	399	929	*121*	342	393	667	4557	1137	652	2522	482	4793	9350
NOV 1988 c	421	1053	423	*49*	408	968	*121*	392	399	679	4743	1137	642	2584	486	4849	9592
NOV 1989 c	420	1168	430	*48*	420	900	*115*	491	405	684	4918	1150	641	2464	500	4755	9673
MAY 1990 c	419	1197	446	*48*	419	884	*113*	548	443	675	5031	1142	641	2569	512	4864	9895
NOV 1990 d	420	1215	456	*48*	434	964	*116*	597	469	683	5238	1152	651	2610	516	4929	10167
MAY 1991 d	420	1225	461	*48*	440	974	*117*	639	481	694	5334	1152	651	2684	549	5036	10370
NOV 1991 d	420	1230	476	*48*	440	979	*117*	688	482	697	5412	1162	651	2752	561	5126	10538
MAY 1992 d	420	1248	486	*48*	445	979	*117*	708	486	700	5472	1167	651	2752	583	5153	10625

NOTE: As of the November 1983 survey, nylon capacity data no longer include Aramid Fiber.

IND Industrial yarn and monofil, i.e., 500 denier & coarser, with an Instron tenacity of 7 grams per denier or more.

CARP Bulked continuous filament yarn for carpets.

TEXTILE Yarn & monofil for other (textile) applications. Low denier industrial yarn is tabulated here also.

a. Includes polyethylene & polypropylene. Not included here are data on spunbonded polyethylene, monofilament bristles, film fiber used for decorative or tying ribbons, etc.

b. Includes the circular and rectangular (ribbon) cross sections plus spunbonded polypropylene. Olefin film fiber includes slit and split or fibrillated fiber.

c. Actual producing capacity as of date shown.

d. Future producing capacity planned for certain dates as of NOV 1990.

e. Data since November 1986 do not include Vinyon.

NOTE: THE INCREASE IN CAPACITY FOR OLEFIN YARN, MONOFILAMENT AND FILM FIBER IS DUE TO A MORE THOROUGH RESPONSE AND NOT BECAUSE OF ADDITIONAL CAPACITY COMING ON STREAM.

SURVEY COVERAGE & DEFINITIONS

The survey figures shown in the table above cover the manufactured fibers in all their primary forms; i.e., filament yarn, monofilaments, polypropylene spunbonded and film fiber are tabulated as filament yarn, while staple, tow and fiberfill are tabulated as staple. The glass fiber data cover all primary forms of that fiber (yarn and strand, staple yarn and sliver, roving and cake, chopped and milled fiber and mat) although only an aggregate figure is published to avoid disclosure of individual company data. **Glass fiber data are no longer included with the filament yarn totals. The data were last published in the December 1984 issue.** The "capacity" to produce waste is **not** included in this survey.

Capacity is based on the current and projected "mix" of deniers, filament counts, packages, etc. It is **emphasized** that all figures refer to ***current*** and ***planned*** capacity. **They are not to be interpreted as a production forecast.**

Under the survey definitions, all productive equipment which is currently, or is planned to be, in operable condition is counted as capacity, regardless of whether it is actually producing fiber at the time the capacity measurement is taken. Equipment which is definitely scheduled for scrapping, or which has been scrapped since the last survey, is excluded from the capacity tabulation. The capacity data reflect ***potential***, rather than ***operating*** capacity.

TABLE 10:
CANADIAN MILL CONSUMPTION OF FIBER [a]
MILLION POUNDS

YEAR	MANUFACTURED FIBER [a]	COTTON	WOOL	TOTAL
1980	464.3	130.1	10.9	605.3
1981	387.9	132.3	15.0	535.2
1982	341.9	88.2	11.7	441.8
1983	424.3	121.3	14.7	560.3
1984	444.1	121.3	14.4	579.8
1985	472.9	105.8	16.1	594.8
1986	548.8	119.0	17.6	685.4
1987	551.2	94.8	15.3	661.3
1988	544.8	91.7	14.0	650.5

TABLE 11:
CANADIAN PER CAPITA FIBER CONSUMPTION [a]
POUNDS

PERIOD	POPULATION	PER CAPITA			
		MANUFACTURED FIBER	COTTON	WOOL	TOTAL
1980	24.1	19.3	5.4	0.5	25.2
1981	24.4	15.9	5.3	0.6	21.8
1982	24.7	13.8	3.6	0.5	17.9
1983	24.9	17.0	4.9	0.6	22.5
1984	25.1	17.7	4.8	0.6	23.1
1985	25.4	18.6	4.2	0.6	23.4
1986	25.6	21.4	4.6	0.7	26.7
1987	25.9	21.3	3.7	0.6	25.6
1988	26.0	21.0	3.5	0.5	25.0

[a] Based on Canadian domestic fiber (mill consumption). See pages 96 - 97.
Population in millions of people.

TABLE 12:

CANADIAN MILL CONSUMPTION OF FIBER AND DOMESTIC CONSUMPTION OF PRODUCTS

MILLION POUNDS & *PERCENT*

	MANUFACTURED FIBER MILL CONSUMPTION=PRODUCERS' SHIPMENTS (DOM) PLUS IMPORTS FOR CONSUMPTION (IMP)															
	ARTIFICIAL (CELLULOSIC) FIBER								SYNTHETIC (NONCELLULOSIC) FIBER							
	YARN+MONOFIL			STAPLE+TOW					YARN+MONOFIL			STAPLE+TOW				
YEAR	DOM	IMP	TOTAL	DOM	IMP	TOTAL	EXP	TOTAL	DOM	IMP	TOTAL	DOM	IMP	TOTAL	EXP	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1980	30.9	17.0	47.9	66.1	9.3	75.4	58.7	64.6	163.1	84.2	247.3	105.8	80.9	186.7	34.3	399.7
1981	29.7	17.2	46.9	62.1	4.0	66.1	54.7	58.3	145.3	59.5	204.8	96.8	92.8	189.6	64.8	329.6
1982	20.9	21.7	42.6	61.7	2.3	64.0	43.9	62.7	114.6	46.1	160.7	99.2	67.5	166.7	48.2	279.2
1983	22.0	24.3	46.3	66.1	4.1	70.2	56.5	60.0	130.6	99.0	229.6	116.9	86.3	203.2	68.5	364.3
1984	22.0	24.3	46.3	61.3	4.1	65.4	53.2	58.5	137.3	99.0	236.3	130.1	86.3	216.4	67.1	385.6
1985	17.6	25.2	42.8	59.3	4.9	64.2	54.1	52.9	165.6	115.1	280.7	119.9	89.9	209.8	70.5	420.0
1986	19.4	28.3	47.7	64.2	5.2	69.4	47.9	69.2	166.0	129.1	295.1	131.0	100.9	231.9	47.4	479.6
1987	18.7	25.4	44.1	62.8	4.5	67.3	60.5	50.9	157.6	143.1	300.7	128.3	101.3	229.6	30.0	500.3
1988	20.5	26.5	47.0	72.3	3.3	75.6	73.4	49.2	166.0	149.4	315.4	129.2	87.1	216.3	36.1	495.6

Continued on opposite page.

TABLE 12:

CANADIAN MILL CONSUMPTION OF FIBER AND DOMESTIC CONSUMPTION OF PRODUCTS

(CONTINUED)

MILLION POUNDS & *PERCENT*

	MILL CONSUMPTION OF 4 FIBERS									DOMESTIC CONSUMPTION OF 3 FIBERS (CONS)=MILL CONSUMPTION+IMPORTS (IMP) LESS EXPORTS (EXP) OF SEMIMANUFACTURED & MANUFACTURED PRODUCTS											
	MANUFACTURED FIBER		COTTON		WOOL		SILK	TOTAL		MANUFACTURED FIBER			COTTON			WOOL			TOTAL		
YEAR	LB	%	LB	%	LB	%	LB	LB	%	IMP	EXP	CONS	IMP	EXP	CONS	IMP	EXP	CONS	IMP	EXP	CONS
	(17)		(18)		(19)		(20)	(21)		(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
1980	464.3	*76.7*	130.1	*21.5*	10.9	*1.8*	- -	605.3	*100.0*	268.3	76.5	656.1	192.7	20.9	301.9	40.3	10.1	41.1	501.3	107.5	999.1
1981	387.9	*72.5*	132.3	*24.7*	15.0	*2.8*	- -	535.2	*100.0*	255.7	74.5	569.1	179.2	19.4	292.1	49.8	8.2	56.6	484.7	102.1	917.8
1982	341.9	*77.4*	88.2	*20.0*	11.7	*2.6*	- -	441.8	*100.0*	228.4	60.8	509.5	193.1	24.3	257.0	46.3	6.6	51.4	467.8	91.7	817.9
1983	424.3	*75.7*	121.3	*21.6*	14.7	*2.6*	- -	560.3	*100.0*	303.4	64.2	663.5	181.7	23.8	279.2	59.5	7.5	66.7	544.6	95.5	1009.4
1984	444.1	*76.6*	121.3	*20.9*	14.4	*2.5*	- -	579.8	*100.0*	342.6	71.9	714.8	198.0	23.4	295.9	72.7	7.5	79.6	613.3	102.8	1090.3
1985	472.9	*79.5*	105.8	*17.8*	16.1	*2.7*	- -	594.8	*100.0*	356.7	62.6	767.0	169.1	23.4	251.5	73.9	9.7	80.3	599.7	95.7	1098.8
1986	548.8	*80.1*	119.0	*17.4*	17.6	*2.6*	- -	685.4	*100.0*	394.2	71.2	871.8	246.7	35.5	330.2	77.5	13.2	81.9	718.4	119.9	1283.9
1987	551.2	*83.4*	94.8	*14.3*	15.3	*2.3*	- -	661.3	*100.0*	414.2	92.8	872.6	304.0	38.8	360.0	75.4	12.6	78.1	793.6	144.2	1310.7
1988	544.8	*83.7*	91.7	*14.1*	14.0	*2.2*	- -	650.5	*100.0*	**DATA NOT AVAILABLE AT PUBLICATION TIME**											

SOURCES OF DATA, ARRANGED BY COLUMN NUMBER ( ):

1 - 16: *Fiber Organon*, January 1990 and earlier editions.

18: *International Cotton Advisory Committee*, October 1990 & 1989 issues. Cotton refers to ginned raw cotton. It does not refer to waste or cotton fibers subjected to any other process. Data are for the cotton year ending July 31, 1988.

19: *Commonwealth Secretariat*. Wool refers to virgin wool, clean basis, at the spinning stage.

22, 23, 25, 26, 28 & 29: *Food and Agriculture Organization of the United Nations*. Some data are preliminary.

CERTAIN TOTALS IN THE TABLES:

(Obvious totals such as columns 1+2=3, 4+5=6, etc. are not described here.)

8	Columns 3 + 6 - 7
16	Columns 11 + 14 - 15
17	Columns 8 + 16
24	Columns 17 + 22 - 23
27	Columns 18 + 25 - 26
30	Columns 19 + 28 - 30

TABLE 13:
CANADIAN MILL CONSUMPTION OF MANUFACTURED FIBER, COTTON, & WOOL

MILLION POUNDS & *PERCENT*

	GRAND TOTAL		COTTON[b]		WOOL[c]		MANUFACTURED FIBER[a]		MANUFACTURED FIBER DETAIL			
									ARTIFICIAL (CELL.) TOTAL[d]		SYNTHETIC (NONCELL.) TOTAL[d]	
YEAR	LB	%	LB	%	LB	%	LB	%	LB	%	LB	%
1980	605.3	*100.0*	130.1	*21.5*	10.9	*1.8*	464.3	*76.7*	64.6	*10.7*	399.7	*66.0*
1981	535.2	*100.0*	132.3	*24.7*	15.0	*2.8*	387.9	*72.5*	58.3	*10.9*	329.6	*61.6*
1982	475.4	*100.0*	88.2	*18.6*	11.7	*2.5*	375.5	*79.0*	83.2	*17.5*	292.3	*61.5*
1983	560.3	*100.0*	121.3	*21.6*	14.7	*2.6*	424.3	*75.7*	60.0	*10.7*	364.3	*65.0*
1984	579.8	*100.0*	121.3	*20.9*	14.4	*2.5*	444.1	*76.6*	58.5	*10.1*	385.6	*66.5*
1985	594.8	*100.0*	105.8	*17.8*	16.1	*2.7*	472.9	*79.5*	52.9	*8.9*	420.0	*70.6*
1986	685.4	*100.0*	119.0	*17.4*	17.6	*2.6*	548.8	*80.1*	69.2	*10.1*	479.6	*70.0*
1987	661.3	*100.0*	94.8	*14.3*	15.3	*2.3*	551.2	*83.4*	50.9	*7.7*	500.3	*75.7*
1988	650.5	*100.0*	91.7	*14.1*	14.0	*2.2*	544.8	*83.8*	49.2	*7.6*	495.6	*76.2*

a. Manufactured fiber data are from ***Fiber Organon***, January 1990 and earlier editions.
The data show the manufactured net available supply, which approximates mill consumptions.

b. **Source:** ***International Cotton Advisory Committee***, October 1989 issue. Cotton refers to ginned raw cotton. It does not refer to waste or cotton fibers subjected to any other process. Data are for the cotton year ending July 31, 1988.

c. **Source:** ***Commonwealth Secretariat***. Wool refers to virgin wool, clean basis, at the spinning stage.

d. Including yarn, staple+tow and spun yarn.

TABLE 14:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3	1										71	6
BRAZIL	26	53	53										132	244
CANADA	628	303	171										1102	2054
CHILE	0	309	66										375	88
GERMANY, FED. REP. OF	422	516	844										1782	2031
IRELAND	145	0	36										181	73
JAPAN	104	72	111										287	301
KOREA, REP. OF	0	22	33										55	88
MEXICO	102	4	121										227	426
NETHERLANDS	282	264	345										891	561
UNITED KINGDOM	34	22	60										116	280
ALL OTHER COUNTRIES [a]	21	56	22										99	112
TOTAL ARTIFICIAL YARN	**1831**	**1624**	**1863**										**5318**	**6264**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493	108										920	1122
CANADA	4973	3854	4391										13218	10840
CHINA, PRC	0	0	0										0	473
GERMANY, DEM. REP.	0	0	0										0	95
GERMANY, FED. REP. OF	89	134	257										480	230
JAPAN	143	204	126										473	1093
SWITZERLAND	0	27	0										27	75
TAIWAN	354	988	1323										2665	56
UNITED KINGDOM	89	93	73										255	491
ALL OTHER COUNTRIES [b]	337	301	183										821	637
TOTAL ARTIFICIAL STAPLE+TOW	**6304**	**6094**	**6461**										**18859**	**15112**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0	43										43	76
BELGIUM	776	122	589										1487	171
BRAZIL	70	71	57										198	339
CANADA	3834	2895	4150										10879	9332
COSTA RICA	762	517	497										1776	1330
ECUADOR	53	16	67										136	261
FRANCE	2007	1305	1065										4377	3410
GERMANY, FED. REP. OF	2096	2021	1480										5597	7076
ISRAEL	0	0	0										0	688
ITALY	892	434	593										1919	2120
JAPAN	760	658	505										1923	1647
KOREA, REP. OF	31	0	90										121	66
MEXICO	1393	900	1607										3900	6054
NETHERLANDS	103	305	921										1329	528
SINGAPORE	16	16	0										32	25
TAIWAN	791	227	114										1132	875
THAILAND	58	93	95										246	198
UNITED KINGDOM	1881	1492	2076										5449	4248
ALL OTHER COUNTRIES [c]	413	319	196										928	432
TOTAL SYNTHETIC YARN	**15936**	**11391**	**14145**										**41472**	**38876**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53	11										64	12
AUSTRALIA	38	120	30										188	192
BELGIUM	1	16	0										17	206
CANADA	3703	2439	3082										9224	3631
FRANCE	592	297	769										1658	787
GERMANY, FED. REP. OF	1017	1236	1063										3316	5061
INDIA	1731	1055	4215										7001	3772
IRELAND	0	26	0										26	1065
ITALY	422	318	534										1274	1082
JAPAN	1754	1763	2307										5824	5833
KOREA, REP. OF	1786	1273	1778										4837	9617
MEXICO	3590	2041	2015										7646	1841
NETHERLANDS	1	0	57										58	233
SPAIN	35	0	0										35	186
SWITZERLAND	399	124	87										610	445
TAIWAN	888	572	931										2391	712
TURKEY	112	114	0										226	18
UNITED KINGDOM	2249	1868	2834										6951	6265
ALL OTHER COUNTRIES [d]	549	326	137										1012	100
TOTAL SYNTHETIC STAPLE+TOW	**18867**	**13641**	**19850**										**52358**	**41058**

a. Ecuador 33, Italy 21, France 14, Uruguay 13, Belgium 12, Taiwan 2, Thailand 2, Hong Kong 1, India 1

b. Poland 338, Sweden 238, Finland 117, Thailand 66, France 41, Netherlands 19, Italy 2

c. Portugal 345, Spain 194, Paraguay 83, Turkey 59, Switzerland 50, Ireland 39, Hong Kong 36, El Salvador 33, Sweden 25, Morocco 23, Finland 21, Yugoslavia 8, Austria 6, Haiti 3, Dominican Republic 2, Greece 1

d. Venezuela 395, Thailand 209, Sweden 180, Malaysia 88, Hong Kong 64, Poland 47, Brazil 27, Denmark 2

TABLE 15:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

	1990												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208	240										690	788
TEXTURED	54	8	0										62	181
OTHER	1385	1371	1471										4227	5039
MONOFILAMENTS & STRIPS	150	37	152										339	256
SUBTOTAL ABOVE	**1831**	**1624**	**1863**										**5318**	**6264**
STAPLE	5989	5884	6154										18027	15029
TOW	312	210	307										829	47
TOPS	3	0	0										3	36
SUBTOTAL ABOVE	**6304**	**6094**	**6461**										**18859**	**15112**
WASTE	**0**	**0**	**0**										**0**	**187**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856	1437										3728	3636
TEXTURED														
UP TO 450 DENIER	270	333	253										856	961
OVER 450 DENIER	2936	1350	2132										6418	3793
OTHER	4531	3817	4273										12621	10912
MONOFILAMENTS & STRIPS	216	117	148										481	289
SUBTOTAL ABOVE	**9388**	**6473**	**8243**										**24104**	**19591**
POLYESTER														
HIGH TENACITY	614	408	506										1528	2746
TEXTURED	785	643	626										2054	4294
POY	719	119	117										955	682
OTHER	2038	1457	1459										4954	4352
MONOFILAMENTS & STRIPS	53	0	67										120	179
SUBTOTAL ABOVE	**4209**	**2627**	**2775**										**9611**	**12253**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408	2224										5083	5292
OTHER	277	223	301										801	986
MONOFILAMENTS & STRIPS	611	660	602										1873	754
SUBTOTAL ABOVE	**2339**	**2291**	**3127**										**7757**	**7032**
STAPLE														
NYLON	4048	3037	4055										11140	5467
POLYESTER	9261	5813	9622										24696	21225
ACRYLIC	1711	1729	2063										5503	4538
POLYPROPYLENE	543	37	160										740	296
OTHER	196	190	320										706	1863
TOW														
NYLON	409	308	555										1272	927
POLYESTER	15	70	70										155	256
ACRYLIC	2512	1973	2649										7134	4859
OTHER	70	5	35										110	383
TOPS	102	479	321										902	1244
SUBTOTAL ABOVE	**18867**	**13641**	**19850**										**52358**	**41058**
WASTE														
NYLON	2694	2074	1628										6396	5529
POLYESTER	2703	2241	1882										6826	2069
OTHER	444	571	1027										2042	1598
TOTAL MANUFACTURED FIBERS ABOVE	**48779**	**37636**	**46856**										**133271**	**110693**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59	54										228	359
SPUN YARN	427	503	318										1248	1258
SPUN YARNS														
SYNTHETIC	2420	2155	2639										7214	14030
ARTIFICIAL	0	0	0										0	0
PUT UP FOR RETAIL SALE	32	24	70										126	148
GRAND TOTAL ABOVE	**51773**	**40377**	**49937**										**142087**	**126488**

SOURCE: U.S. Census Bureau Report IM145X

TABLE 16:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37	44										173	67
TEXTURED	217	9	30										256	509
OTHER	66	106	57										229	775
MONOFILAMENTS & STRIPS	97	0	15										112	97
SUBTOTAL ABOVE	**472**	**152**	**146**										**770**	**1448**
STAPLE	1195	2051	1838										5084	5938
TOPS	333	0	203										536	102
SUBTOTAL ABOVE	**1528**	**2051**	**2041**										**5620**	**6040**
WASTE	**330**	**407**	**614**										**1351**	**3449**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357	9332										24446	26625
TEXTURED														
UP TO 450 DENIER	1571	588	626										2785	1827
OVER 450 DENIER	5636	4353	5225										15214	15216
OTHER	2637	2264	3143										8044	6274
MONOFILAMENTS & STRIPS	8	32	93										133	684
SUBTOTAL ABOVE	**17609**	**14594**	**18419**										**50622**	**50626**
POLYESTER														
HIGH TENACITY	4308	5166	5459										14933	8926
TEXTURED	3074	3021	4078										10173	9713
POY	1831	2368	1287										5486	4393
OTHER	1297	1746	1824										4867	2420
MONOFILAMENTS & STRIPS	185	285	91										561	624
SUBTOTAL ABOVE	**10695**	**12586**	**12739**										**36020**	**26076**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523	549										1607	2362
OTHER	2035	2007	2279										6321	4548
MONOFILAMENTS & STRIPS	876	913	1664										3453	1678
SUBTOTAL ABOVE	**3446**	**3443**	**4492**										**11381**	**8588**
STAPLE														
NYLON	3163	2765	2343										8271	9132
POLYESTER	7157	6405	9490										23052	37750
ACRYLIC	4584	3178	3882										11644	15643
POLYPROPYLENE	2038	1561	2666										6265	4034
OTHER	2688	923	1504										5115	4361
TOW														
NYLON	121	176	155										452	131
POLYESTER	18	64	0										82	1073
ACRYLIC	1710	1787	989										4486	4983
OTHER	26	12	15										53	211
TOPS	3984	2729	2309										9022	3035
SUBTOTAL ABOVE	**25489**	**19600**	**23353**										**58442**	**80353**
WASTE														
NYLON	4117	4250	3894										12261	6404
POLYESTER	3268	2845	2782										8895	11538
OTHER	3343	3700	4979										12022	20150
TOTAL MANUFACTURED FIBERS ABOVE	**70297**	**63628**	**73459**										**207384**	**214672**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	28	45	32										105	107
SPUN YARN	0	0	0										0	0
SPUN YARNS														
SYNTHETIC	3007	4304	3749										11060	9218
ARTIFICIAL	0	0	0										0	0
PUT UP FOR RETAIL SALE	287	398	641										1326	2269
GRAND TOTAL ABOVE	**73619**	**68375**	**77881**										**219875**	**226266**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 17:
QUARTERLY MANUFACTURED FIBER DATA

MILLION POUNDS

ITEM	1988					1989					1990				
	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
						YARN+MONOFILAMENTS									
ARTIFICIAL (CELLULOSIC) YARN [d]															
PRODUCTION	**49.1**	**54.4**	**54.9**	**55.5**	**213.9**	**52.7**	**55.8**	**56.7**	**52.3**	**217.5**	**46.8**				
SHIPMENTS - DOMESTIC	41.4	47.3	45.8	48.1	182.6	46.0	50.3	45.6	45.4	187.3	40.2				
- EXPORT	8.7	7.9	10.0	7.5	34.1	6.8	7.9	8.4	8.6	31.7	7.7				
TOTAL SHIPMENTS	**50.1**	**55.2**	**55.8**	**55.6**	**216.7**	**52.8**	**58.2**	**54.0**	**54.0**	**219.0**	**47.9**				
ENDING STOCK	**13.2**	**12.4**	**11.5**	**11.4**		**11.3**	**8.9**	**11.6**	**9.9**		**8.8**				
IMPORTS	4.0	4.0	4.4	5.2	17.6	6.3	5.9	1.3	6.8	26.3	5.3				
TOTAL AVAILABLE	**45.4**	**51.3**	**50.2**	**53.3**	**200.2**	**52.3**	**56.2**	**52.9**	**52.2**	**213.6**	**45.5**				
NYLON															
PRODUCTION	**431.7**	**440.0**	**428.8**	**427.0**	**1727.5**	**436.9**	**447.5**	**434.8**	**440.0**	**1759.2**	**428.3**				
SHIPMENTS - DOMESTIC	387.8	395.4	391.1	398.1	1572.4	387.9	399.7	400.9	386.8	1575.3	382.5				
- EXPORT	39.6	38.1	41.5	46.8	166.0	42.7	38.9	34.8	40.4	156.8	37.9				
TOTAL SHIPMENTS	**427.4**	**433.5**	**432.6**	**444.9**	**1738.4**	**430.6**	**438.6**	**435.7**	**427.2**	**1732.1**	**420.4**				
ENDING STOCK	**140.5**	**147.0**	**143.2**	**125.3**		**131.6**	**140.5**	**139.6**	**152.4**		**160.3**				
OLEFIN [a]															
PRODUCTION	**307.6**	**313.8**	**296.6**	**306.1**	**1224.1**	**313.8**	**324.6**	**310.4**	**308.4**	**1257.2**	**332.3**				
SHIPMENTS - DOMESTIC	303.5	307.7	288.8	299.8	1199.8	308.0	315.5	301.6	300.9	1226.0	327.8				
- EXPORT	2.7	5.9	6.0	5.2	19.8	5.2	6.4	7.2	3.7	22.5	4.6				
TOTAL SHIPMENTS	**306.2**	**313.6**	**294.8**	**305.0**	**1219.6**	**313.2**	**321.9**	**308.8**	**304.6**	**1248.5**	**332.4**				
ENDING STOCK	**54.3**	**54.5**	**56.3**	**57.4**		**58.0**	**60.7**	**62.3**	**66.1**		**66.0**				
POLYESTER															
PRODUCTION	**284.5**	**313.5**	**304.6**	**326.2**	**1228.8**	**314.4**	**325.3**	**306.4**	**262.9**	**1209.0**	**262.1**				
SHIPMENTS - DOMESTIC	266.7	291.9	278.2	320.6	1157.4	292.0	303.6	264.1	251.0	1110.7	241.7				
- EXPORT	18.8	17.8	16.7	21.4	74.7	16.0	13.1	13.3	16.2	58.6	16.7				
TOTAL SHIPMENTS	**285.5**	**309.7**	**294.9**	**342.0**	**1232.1**	**308.0**	**316.7**	**277.4**	**267.2**	**1169.3**	**258.4**				
ENDING STOCK	**108.3**	**112.1**	**121.8**	**106.0**		**112.4**	**121.0**	**150.0**	**145.7**		**149.4**				
TOTAL SYNTHETIC (NONCELLULOSIC) ABOVE															
PRODUCTION	**1023.8**	**1067.3**	**1030.0**	**1059.3**	**4180.4**	**1065.1**	**1097.4**	**1051.6**	**1011.3**	**4225.4**	**1022.7**				
SHIPMENTS - DOMESTIC	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	966.6	938.7	3912.0	952.0				
- EXPORT	61.1	61.8	64.2	73.4	260.5	63.9	58.4	55.3	60.3	237.9	59.2				
SHIPMENTS	**1019.1**	**1056.8**	**1022.3**	**1091.9**	**4190.1**	**1051.8**	**1077.2**	**1021.9**	**999.0**	**4149.9**	**1011.2**				
ENDING STOCK	**303.1**	**313.6**	**321.3**	**288.7**		**302.0**	**322.2**	**351.9**	**364.2**		**375.7**				
DOMESTIC SHIPMENTS	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	966.6	938.7	3912.0	952.0				
IMPORTS - TEXTURED YARN [b]	15.7	14.7	16.1	14.1	60.6	14.4	14.7	15.0	11.8	55.9	14.4				
- OTHER YARN [b]	11.2	11.1	11.9	13.4	47.6	23.3	33.0	32.5	28.6	117.4	24.6				
- MONOFILAMENTS	1.8	2.3	2.0	2.0	8.1	1.2	1.6	4.0	2.1	8.9	2.5				
TOTAL IMPORTS	28.7	28.1	30.0	29.5	116.3	38.9	49.3	51.5	42.5	182.2	41.5				
TOTAL AVAILABLE	**986.7**	**1023.1**	**988.1**	**1048.0**	**4045.9**	**1026.8**	**1068.1**	**1018.1**	**981.2**	**4094.2**	**993.5**				
						GLASS FIBER									
TOTAL SHIPMENTS	**386.4**	**415.2**	**405.9**	**380.2**	**1587.7**	**394.2**	**399.3**	**363.4**	**373.2**	**1530.1**	**374.5**				

FOOTNOTES FOR TABLE ABOVE & OPPOSITE:

"Imports" are imports for consumption, as reported by the U.S. Census Bureau.

a. Also include film fiber as well as spunbonded polypropylene.

b. Includes singles and plied.

c. For 1988, these figures are composites of the nylon, acrylic+modacrylic and polyester staple imports, i.e., Commodity Numbers 309.4331, .4351, .4336 & .4361. For 1989-1990 Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon.***

d. Includes both rayon & acetate yarn.

e. For 1988, these figures are composites of olefin and other staple imports, i.e., Commodity Numbers 309.4371, .4341 & .4390. For 1989-1990, Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon.***

TABLE 17:
QUARTERLY MANUFACTURED FIBER DATA *(Continued)*

MILLION POUNDS

	1988					1989					1990				
ITEM	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
						STAPLE+TOW									
RAYON															
PRODUCTION	106.6	101.2	99.4	92.6	399.8	100.8	101.2	83.2	77.6	362.8	73.3				
SHIPMENTS - DOMESTIC	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6	70.2	338.2	77.6				
- EXPORT	5.1	6.1	5.5	3.8	20.5	3.4	5.4	4.3	3.1	16.2	4.1				
TOTAL SHIPMENTS	107.0	108.1	99.5	91.9	406.5	103.1	97.1	80.9	73.3	354.4	81.7				
ENDING STOCK	20.3	13.4	13.3	14.0		11.7	15.8	18.1	22.4		14.0				
DOMESTIC SHIPMENTS	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6	70.2	338.2	77.6				
IMPORTS FOR CONSUMPTION															
STAPLE	3.2	3.8	5.5	6.5	19.0	} 15.1	13.3	12.4	13.2	54.0	18.9				
GROUPED FILAMENTS	0.2	0.3	0.5	0.4	1.4										
TOTAL IMPORTS	3.4	4.1	6.0	6.9	20.4	15.1	13.3	12.4	13.2	54.0	18.9				
TOTAL AVAILABLE	105.3	106.1	100.0	95.0	406.4	114.8	105.0	89.0	83.4	392.2	96.5				
NYLON															
PRODUCTION	231.5	235.9	226.6	247.8	941.8	252.9	242.0	241.0	244.8	980.7	237.0				
SHIPMENTS-DOMESTIC	239.4	223.9	241.6	240.0	944.9	242.0	231.2	245.8	236.3	955.3	242.6				
-EXPORT	4.3	4.3	4.9	5.5	19.0	7.5	4.8	5.4	5.5	23.2	7.1				
TOTAL SHIPMENTS	243.7	228.2	246.5	245.5	963.9	249.5	236.0	251.2	241.8	978.5	249.7				
ENDING STOCK	57.5	65.2	45.3	47.6		51.0	57.0	46.8	49.8		37.1				
IMPORTS	4.9	5.1	5.4	6.5	21.9	6.4	5.4	5.4	8.9	26.1	12.4				
TOTAL AVAILABLE	244.3	229.0	247.0	246.5	966.8	248.4	236.6	251.2	245.2	981.4	255.0				
ACRYLIC+MODACRYLIC															
PRODUCTION	148.8	150.9	141.5	146.9	588.1	144.3	145.6	129.4	123.4	542.7	129.6				
SHIPMENTS-DOMESTIC	109.0	109.3	107.3	95.5	421.1	112.9	112.4	102.8	86.7	414.8	98.8				
-EXPORT	47.7	29.1	39.8	52.5	169.1	23.6	32.5	30.0	36.5	122.6	24.5				
TOTAL SHIPMENTS	156.7	138.4	147.1	148.0	590.2	136.5	144.9	132.8	123.2	537.4	123.3				
ENDING STOCK	55.4	67.9	62.3	61.2		69.0	69.7	66.3	66.5		72.8				
IMPORTS	3.3	4.4	3.3	4.3	15.3	9.4	11.1	8.5	8.5	37.5	12.6				
TOTAL AVAILABLE	112.3	113.7	110.6	99.8	436.4	122.3	123.5	111.3	95.2	452.3	111.4				
OLEFIN															
PRODUCTION	94.3	94.5	85.9	89.3	364.0	97.1	97.7	92.0	94.8	381.6	96.9				
SHIPMENTS-DOMESTIC	83.8	87.6	84.8	88.0	344.2	91.6	93.5	91.4	86.9	363.4	94.0				
-EXPORT	5.6	5.8	4.4	3.8	19.6	3.1	3.7	3.4	3.8	14.0	6.0				
TOTAL SHIPMENTS	89.4	93.4	89.2	91.8	363.8	94.7	97.2	94.8	90.7	377.4	100.0				
ENDING STOCK	35.0	36.1	32.8	30.3		32.8	33.3	30.5	34.6		31.5				
POLYESTER															
PRODUCTION	587.4	619.5	604.3	640.6	2451.8	609.4	648.8	591.0	536.1	2385.3	520.8				
SHIPMENTS-DOMESTIC	558.3	572.5	551.2	629.8	2311.8	575.4	594.6	543.0	548.3	2261.3	502.5				
-EXPORT	27.8	31.1	38.2	40.0	137.1	34.9	21.7	20.1	16.8	93.5	15.3				
TOTAL SHIPMENTS	586.1	603.6	589.4	669.8	2448.9	610.3	616.3	563.1	565.1	2354.8	517.8				
ENDING STOCK	157.8	173.7	188.6	159.4		158.5	191.0	218.9	189.9		192.9				
IMPORTS	15.0	20.7	22.3	15.2	73.2	21.5	29.9	34.5	32.7	118.6	24.9				
TOTAL AVAILABLE	573.3	593.2	573.5	645.0	2385.0	596.9	624.5	577.5	581.0	2379.9	527.4				
TOTAL SYNTHETIC (NONCELLULOSIC)															
PRODUCTION	1062.0	1100.8	1058.3	1124.6	4345.7	1103.7	1134.1	1053.4	999.1	4290.3	984.3				
SHIPMENTS-DOMESTIC	990.5	993.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0	958.2	3994.8	937.9				
-EXPORT	85.4	70.3	87.3	101.8	344.8	69.1	62.7	58.9	62.6	253.3	52.9				
TOTAL SHIPMENTS	1075.9	1063.6	1072.2	1155.1	4366.8	1091.0	1094.4	1041.9	1020.8	4248.1	990.8				
ENDING STOCK	305.7	342.9	329.0	298.5		311.3	351.0	362.5	340.8		334.3				
DOMESTIC SHIPMENTS	990.5	933.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0	958.2	3994.8	937.9				
IMPORTS FOR CONSUMPTION															
3 FIBERS ABOVE [c]	23.2	30.2	31.0	26.0	110.4	37.3	46.4	48.4	50.1	182.2	49.9				
OTHER N.C. STAPLE [e]	5.6	5.7	4.3	4.2	19.8	} 3.7	2.8	1.7	2.0	10.2	2.5				
GROUPED FILAMENTS	14.5	17.8	15.7	17.8	65.8										
TOTAL IMPORTS	43.3	53.7	51.0	48.0	196.0	41.0	49.2	50.1	52.1	192.4	52.4				
TOTAL AVAILABLE	1033.8	1047.0	1035.9	1101.3	4218.0	1062.9	1080.9	1033.1	1010.3	4187.2	990.3				

See footnotes on opposite page

TABLE 18:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

ITEM	1990												YEAR TO DATE[a]	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
MANUFACTURED FIBER TOTAL SHIPMENTS[b c]														
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4	18.1									66.0	74.3
RAYON STAPLE	30.1	25.3	26.3	28.2									109.9	134.5
TOTAL ARTIFICIAL (CELLULOSIC)	**45.2**	**40.7**	**43.7**	**46.3**									**175.9**	**208.8**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4	28.4									112.0	126.7
- CARPET	86.5	81.1	82.2	85.4									335.2	311.6
- TEXTILE[f]	28.9	28.2	29.9	32.0									119.0	136.7
POLYESTER - INDUSTRIAL[d]	27.2	28.6	31.8	32.6									120.2	121.4
- TEXTILE[f]	56.6	56.2	58.0	69.8									240.6	297.0
OLEFIN[e]	104.5	113.9	114.1	112.3									444.8	417.3
TOTAL YARN	**328.6**	**338.3**	**344.4**	**360.5**									**1371.8**	**1410.7**
STAPLE+TOW+FIBERFILL														
NYLON	88.8	74.9	86.0	85.0									334.7	325.9
ACRYLIC+MODACRYLIC	40.4	39.7	43.2	39.7									163.0	185.7
POLYESTER	168.9	175.7	173.2	181.7									699.5	824.6
OLEFIN	30.3	34.4	35.3	34.5									134.5	126.1
TOTAL STAPLE	**328.4**	**324.7**	**337.7**	**340.9**									**1331.7**	**1462.3**
TOTAL SYNTHETIC (NONCELLULOSIC)	**657.0**	**663.0**	**682.1**	**701.4**									**2703.5**	**2873.0**
TOTAL MANUFACTURED FIBER	**702.2**	**703.7**	**725.8**	**747.7**									**2879.4**	**3081.8**
MANUFACTURED FIBER END-OF-MONTH STOCK														
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8	9.1									9.1	10.4
RAYON STAPLE	20.2	17.2	14.0	14.2									14.2	12.5
TOTAL ARTIFICIAL (CELLULOSIC)	**29.9**	**27.1**	**22.8**	**23.3**									**23.3**	**22.9**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4	36.0									36.0	22.9
- CARPET	60.5	61.2	62.6	63.0									63.0	68.7
- TEXTILE[f]	57.0	59.9	64.3	63.5									63.5	47.0
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5	39.2									39.2	31.6
- TEXTILE[f]	94.5	104.9	109.9	106.4									106.4	85.1
OLEFIN[e]	68.1	66.6	66.0	63.7									63.7	57.8
TOTAL YARN	**356.2**	**366.9**	**375.7**	**371.8**									**371.8**	**313.1**
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1	44.3									44.3	57.5
ACRYLIC+MODACRYLIC	69.5	70.9	72.8	75.3									75.3	67.3
POLYESTER	193.5	195.1	192.9	217.9									217.9	164.4
OLEFIN	34.6	33.4	31.5	30.5									30.5	34.3
TOTAL STAPLE	**337.7**	**339.9**	**334.3**	**368.0**									**368.0**	**323.5**
TOTAL SYNTHETIC (NONCELLULOSIC)	**693.9**	**706.8**	**710.0**	**739.8**									**739.8**	**636.6**
TOTAL MANUFACTURED FIBER	**723.8**	**733.9**	**732.8**	**763.1**									**763.1**	**659.5**
WOOL & COTTON CONSUMPTION														
APPAREL CLASS WOOL														
CARPET CLASS WOOL														
TOTAL RAW WOOL[g]														
RAW COTTON	317.3	332.1	369.9										1019.3	949.9
1989 WOOL & COTTON CONSUMPTION - REVISED														
APPAREL CLASS WOOL	11.2	11.8	12.8	10.8	11.7	11.6	9.2	9.7	10.4	8.7	8.6	9.0	125.5	140.7
CARPET CLASS WOOL	0.8	1.2	1.3	1.4	1.3	1.2	1.1	1.3	1.5	1.1	0.9	1.0	14.1	15.4
TOTAL RAW WOOL	**12.0**	**13.0**	**14.1**	**12.2**	**13.0**	**12.8**	**10.3**	**11.0**	**11.9**	**9.8**	**9.5**	**10.0**	**139.6**	**156.1**
RAW COTTON	296.8	305.9	347.2	311.9	370.2	351.1	294.0	341.0	400.4	332.7	324.0	310.7	3985.9	3470.1

a. "Year to date" totals for stock, are the latest month's figures.

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

g. **Wool data for 1990 available on a quarterly basis only.**

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FIBER ORGANON

Formerly Textile Organon

Volume 61, No. 6 ☐ **June 1990**

A publication of *Fiber Economics Bureau, Inc.*

WORLDWIDE MANUFACTURED FIBER SURVEY

Highlights

- Worldwide Survey -

  Fiber Demand
  Production and Producing Capacities
  Utilization Rates
  Directory of Producers
  Ownership Listing
  Olefin Fiber Production

Featuring....

Our annual survey of worldwide manufactured fiber production and planned capacity, with a worldwide directory of manufactured fiber producers.

Worldwide data in this issue are reported in thousand metric tons. The production and capacity tables will be published again in the July issue in millions of pounds. Country data on available supply will be published in the ***Fiber Organon*** as soon as information is available.

Data for previous years for most of the tables in this issue can be found in the ***Textile Organon Base Book*** (1962) and subsequent June issues of the ***Textile Organon*** and ***Fiber Organon***. The cotton demand figures shown in the table below are based on worldwide consumption rather than production, to eliminate problems from wide swings in cotton inventories.

TABLE 1:
WORLDWIDE DEMAND FOR CERTAIN FIBERS
THOUSAND METRIC TONS

TYPE OF FIBER	1985	1986	1987	1988	1989	*% CHANGE 1989 / 1988*
ARTIFICIAL (CELLULOSIC) FIBERS						
YARN+MONOFILAMENTS	924	924	910	948	928	*-2.1*
STAPLE+TOW	2007	1935	1941	1939	1946	*+0.4*
TOTAL ARTIFICIAL (CELLULOSIC)	**2931**	**2859**	**2851**	**2887**	**2874**	***-0.5***
SYNTHETIC (NONCELLULOSIC) FIBERS						
YARN+MONOFILAMENTS	5578	5694	6040	6542	6719	*+2.7*
STAPLE+TOW	6911	7247	7704	7821	7998	*+2.3*
TOTAL SYNTHETIC (NONCELLULOSIC)	**12489**	**12941**	**13744**	**14363**	**14717**	***+2.5***
TOTAL MANUFACTURED [a]	**15420**	**15800**	**16595**	**17250**	**17591**	***+2.0***
% of World Total	*46%*	*44%*	*45%*	*46%*	*46%*	
NATURAL FIBERS						
RAW COTTON [b]	16565	18280	18243	18484	18733	*+1.3*
RAW WOOL [c]	1722	1790	1835	1883	1933	*+2.7*
RAW SILK [d]	59	63	63	64	66	*+3.1*
TOTAL NATURAL	**18346**	**20133**	**20141**	**20431**	**20732**	***+1.5***
% of World Total	*54%*	*56%*	*55%*	*54%*	*54%*	
WORLD TOTAL	**33766**	**35933**	**36736**	**37681**	**38323**	***+1.7***
World Total %	*100%*	*100%*	*100%*	*100%*	*100%*	

The silk and manufactured fiber data are on a calendar year basis, while the figures for cotton and wool are on a seasonal basis.

a. Manufactured fiber data are from tables 3 and 4. Glass fiber, olefin and acetate cigarette tow production are not included.

b. International Cotton Advisory Committee. ***COTTON: Review of the World Situation***, May - June 1990. New series based on cotton consumption data.

c. Commonwealth Secretariat. ***Wool Quarterly,*** No.III, 1989, on a clean wool basis. See also the December 1989 ***Fiber Organon***, page 267.

d. International Silk Association; Food and Agriculture Organization of the United States.

Fiber Organon

A Monthly Review

June 1990

CONTENTS

Features

Worldwide Manufactured Fiber Survey **105 - 152**
- Worldwide Demand for Certain Fibers 105
- Number of Manufactured Fiber Producing Plants 107
- Worldwide Synthetic (Noncellulosic) Fiber Production & Producing Capacity by Country 108 - 111
- Worldwide Artificial (Cellulosic) Fiber Production & Producing Capacity by Country 112 - 115
- Worldwide Rayon vs. Acetate Filament Yarn Production & Producing Capacity by Country 116 - 117
- Worldwide Synthetic (Noncellulosic) Fiber Production & Producing Capacity by Fiber 118 - 119
- Worldwide Glass Fiber Production & Producing Capacity 120
- Estimated Worldwide Cigarette Tow Production 120
- Worldwide Olefin Fiber Production by Country 121
- **Worldwide Directory of Manufactured Fiber Producers** **122 - 150**
- **Worldwide Ownership Listing** **151 - 152**

Industry Regulars

Monthly U.S. Manufactured Fiber Data **153 - 155**
- Imports by Country of Origin 153
- Imports by Fiber 154
- Exports by Fiber 155

Quarterly Manufactured Fiber Data **156 - 157**
- Filament Yarn Domestic Shipments 156
- Staple+Tow Domestic Shipments 157

Selected U.S. Monthly Fiber Data **158**

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President & Editor
Rosemarie D. Frick

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TABLE 2:
NUMBER OF MANUFACTURED FIBER PRODUCING PLANTS (EXCEPT OLEFIN)

COUNTRY & REGION	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELLULOSIC)					GLASS FIBER	GRAND TOTAL
	ACETATE[a]	RAYON	ACRYLIC[b]	NYLON[c]	POLY-ESTER	OTHER[d]	TOTAL		
WESTERN EUROPE									
AUSTRIA		3			1	1	2		5
BELGIUM/LUXEMBOURG	1	1		3	1		4	2	8
FINLAND		1		1			1	1	3
FRANCE		1	1	8	3	1	13	2	16
GERMANY, FED. REP.	1	4	3	11	11	4	29	3	37
GREECE		1	1	2	3		6		7
IRELAND			1	1	2		4		4
ITALY/MALTA	2	2	5	17	11	2	35	2	41
NETHERLANDS		1		1	1	2	4	1	6
NORWAY								1	1
PORTUGAL		2	1	2	1		4	1	7
SPAIN	1	2	2	7	5		14	1	18
SWEDEN		1						1	2
SWITZERLAND				5	3		8		8
TURKEY		1	2	5	8		15	1	17
UNITED KINGDOM	2	1	2	8	6	4	20	6	29
TOTAL WESTERN EUROPE	7	21	18	71	56	14	159	22	209
EASTERN EUROPE									
ALBANIA					1		1		1
BULGARIA		1	1	1	1		3		4
CZECHOSLOVAKIA		6		3	2		5	2	13
GERMANY, DEM. REP.		8	2	3	2	1	8	1	17
HUNGARY		2	1	1			2		4
POLAND		4	1	1	2	2	6	2	12
ROMANIA		3	1	1	4		6		9
USSR	4	15	1	12	4	1	18	11	48
YUGOSLAVIA		2	1	2	5		8	1	11
TOTAL EASTERN EUROPE	4	41	8	24	21	4	57	17	119
U.S.A.	3	3	5	37	35	9	86	17	109
CANADA	1	1		3	1	1	5	1	8
OTHER AMERICAS									
ARGENTINA	1		1	7	5	1	14	1	16
BRAZIL	1	2	2	16	12	1	31	1	35
CHILE		1		2	3		5		6
COLOMBIA	1			3	5		8		9
COSTA RICA					1		1		1
CUBA		1							1
ECUADOR					3		3		3
GUATEMALA				1			1		1
MEXICO	1	1	3	8	9	2	22	1	25
PERU	1		1	3	3		7		8
URUGUAY	1			3	2		5		6
VENEZUELA	1			2	3	1	6		7
TOTAL OTHER AMERICAS	7	5	7	45	46	5	103	3	118
JAPAN	2	11	7	14	19	18	58	13	84
CHINA, PRC	e	9	10	12	20	8	50	3	62
OTHER ASIA									
BANGLADESH		2	1	1			2		4
INDIA	1	12	3	12	18		33		46
INDONESIA		3	1	5	12		18		21
KOREA, REP. OF	1	1	2	5	11	3	21		23
MALAYSIA		5		1	10		11		16
PAKISTAN	1			3	11		14		15
PHILIPPINES		1		2	2		4		5
SRI LANKA				1			1		1
TAIWAN		3	3	14	17		34		37
THAILAND		1	1	3	6		10		11
TOTAL OTHER ASIA	3	28	11	47	87	3	148		179
MIDDLE EAST, AFRICA & OCEANIA									
AUSTRALIA				2	2		4	1	5
EGYPT		2		1	2		3		5
IRAN			1	2	1		4		4
IRAQ		1							1
ISRAEL				1			1		1
KENYA				1	6		7		7
NIGERIA					1		1		1
SOUTH AFRICA				3	4		7		7
TANZANIA					1		1		1
TOTAL MIDDLE EAST, AFRICA & OCEANIA		3	1	10	17		28	1	32
WORLD TOTAL*	27	122	67	263	302	62	694	77	920

Planned facilities indicated by an asterick (*) in our listing of worldwide producers are not included in the above table.

* Data for North Korea are not included here.

a. Acetate includes triacetate.

b. Acrylic includes modacrylic.

c. Nylon excludes aramid.

d. Other includes 21 spandex, 11 vinyon, 6 saran, 6 vinal, 5 aramid, 2 biconstituent, 2 fluorocarbon, and 1 each of azlon, cupro, PBI, polyacrylate, polycarbonate, polychlal, polioassiamide, promix and sulfar.

e. China, PRC acetate data included with rayon data.

TABLE 3:
WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY EXCEPT OLEFIN
THOUSAND METRIC TONS

COUNTRY	ACTUAL PRODUCTION								
	1985			1986			1987		
	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
WESTERN EUROPE									
AUSTRIA	0	18.1	18.1	0	15.9	15.9	0	15.7	15.7
BENELUX[a]	80.5	30.1	110.6	73.0	34.4	107.4	74.0	33.0	107.0
FINLAND	0.5	0	0.5	0.2	0	0.2	0.1	0	0.1
FRANCE	60.7	122.0	182.7	61.2	106.0	167.2	56.8	104.2	161.0
GERMANY, FED. REP.	360.0	402.0	762.0	350.0	395.0	745.0	355.3	404.0	759.3
GREECE	9.0	10.0	19.0	9.4	10.5	19.9	9.4	10.0	19.4
IRELAND	11.5	45.3	56.8	11.0	61.0	72.0	11.0	63.0	74.0
ITALY/MALTA	171.6	392.0	563.6	175.0	401.9	576.9	171.0	393.6	564.6
PORTUGAL	1.0	51.0	52.0	0	55.0	55.0	0	57.8	57.8
SPAIN	85.0	189.9	274.9	84.9	191.3	276.2	80.5	188.0	268.5
SWITZERLAND	73.1	26.6	99.7	67.1	26.0	93.1	66.2	22.1	88.3
TURKEY	52.0	134.0	186.0	60.0	169.0	229.0	69.0	191.0	260.0
UNITED KINGDOM	84.7	158.0	242.7	78.2	130.0	208.2	81.4	121.6	203.0
TOTAL WESTERN EUROPE	**989.6**	**1579.0**	**2568.6**	**970.0**	**1596.0**	**2566.0**	**974.7**	**1604.0**	**2578.7**
EASTERN EUROPE									
ALBANIA	0.4	0	0.4	0.4	0	0.4	0.5	0	0.5
BULGARIA	28.0	42.8	70.8	38.0	47.9	85.9	39.6	48.7	88.3
CZECHOSLOVAKIA	76.0	38.8	114.8	74.7	45.8	120.5	76.6	46.5	123.1
GERMANY, DEM. REP.	65.0	80.8	145.8	77.0	81.8	158.8	72.6	80.7	153.3
HUNGARY	8.4	14.4	22.8	8.4	15.6	24.0	6.8	16.9	23.7
POLAND	86.4	50.6	137.0	85.6	46.6	132.2	87.8	46.6	134.4
ROMANIA	58.0	138.8	196.8	58.8	140.9	199.7	59.5	142.4	201.9
USSR	388.8	324.0	712.8	404.8	353.0	757.8	435.0	410.2	845.2
YUGOSLAVIA	35.5	59.5	95.0	39.7	57.6	97.3	46.0	63.9	109.9
TOTAL EASTERN EUROPE	**746.5**	**749.7**	**1496.2**	**787.4**	**789.2**	**1576.6**	**824.4**	**855.9**	**1680.3**
TOTAL EUROPE	**1736.1**	**2328.7**	**4064.8**	**1757.4**	**2385.2**	**4142.6**	**1799.1**	**2459.9**	**4259.0**

Y Yarn+monofilaments.
S Staple+tow+fiberfill.
a. Includes Belgium, Netherlands and Luxembourg.

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
0	16.7	16.7	0	17.4	17.4	*0*	*22.0*	*22.0*	*0*	*22.0*	*22.0*
76.9	33.6	110.5	80.0	40.0	120.0	*103.5*	*76.5*	*180.0*	*103.5*	*81.5*	*185.0*
0.1	0	0.1	0.2	0	0.2	*0.5*	*0*	*0.5*	*0.5*	*0*	*0.5*
58.4	116.4	174.8	58.4	106.6	165.0	*80.5*	*127.5*	*208.0*	*67.0*	*128.0*	*195.0*
359.9	391.2	751.1	355.0	420.0	775.0	*423.0*	*438.0*	*861.0*	*432.0*	*443.0*	*875.0*
9.5	9.5	19.0	10.2	8.0	18.2	*17.0*	*12.0*	*29.0*	*17.0*	*12.0*	*29.0*
13.5	65.7	79.2	16.7	73.3	90.0	*14.0*	*82.0*	*96.0*	*18.0*	*82.0*	*100.0*
186.6	377.6	564.2	195.0	345.0	540.0	*197.0*	*446.0*	*643.0*	*195.0*	*455.0*	*650.0*
0	54.3	54.3	0	55.8	55.8	*0*	*66.0*	*66.0*	*0*	*66.0*	*66.0*
79.6	185.8	265.4	79.3	175.7	255.0	*119.0*	*222.0*	*341.0*	*119.0*	*221.0*	*340.0*
72.8	27.4	100.2	72.6	23.0	95.6	*85.0*	*33.0*	*118.0*	*80.0*	*33.0*	*113.0*
77.0	182.0	259.0	87.0	196.0	283.0	*166.0*	*241.0*	*407.0*	*173.0*	*251.0*	*424.0*
93.6	99.9	193.5	100.0	85.0	185.0	*108.0*	*160.0*	*268.0*	*100.0*	*170.0*	*270.0*
1027.9	**1560.1**	**2588.0**	**1054.4**	**1545.8**	**2600.2**	***1313.5***	***1926.0***	***3239.5***	***1305.0***	***1964.5***	***3269.5***
0.5	0	0.5	0.5	0	0.5	*2.0*	*0*	*2.0*	*2.0*	*5.0*	*7.0*
40.9	49.2	90.1	41.2	49.6	90.8	*60.0*	*108.0*	*168.0*	*60.0*	*108.0*	*168.0*
81.3	48.0	129.3	76.1	52.3	128.4	*100.9*	*87.0*	*187.9*	*100.9*	*87.0*	*187.9*
78.3	85.2	163.5	76.0	88.6	164.6	*97.3*	*130.0*	*227.3*	*107.3*	*130.0*	*237.3*
8.5	18.1	26.6	6.6	19.0	25.6	*12.5*	*20.0*	*32.5*	*12.5*	*43.0*	*55.5*
89.4	53.3	142.7	80.2	49.4	129.6	*114.2*	*71.0*	*185.2*	*114.2*	*86.0*	*200.2*
59.4	143.6	203.0	59.7	144.1	203.8	*68.0*	*179.0*	*247.0*	*68.0*	*179.0*	*247.0*
457.7	411.1	868.8	468.2	422.0	890.2	*540.0*	*525.0*	*1065.0*	*569.0*	*537.0*	*1106.0*
45.2	57.8	103.0	47.1	60.4	107.5	*72.0*	*112.0*	*184.0*	*76.0*	*112.0*	*188.0*
861.2	**866.3**	**1727.5**	**855.6**	**885.4**	**1741.0**	***1066.9***	***1232.0***	***2298.9***	***1109.9***	***1287.0***	***2396.9***
1889.1	**2426.4**	**4315.5**	**1910.0**	**2431.2**	**4341.2**	***2380.4***	***3158.0***	***5538.4***	***2414.9***	***3251.5***	***5666.4***

TABLE 3:
WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY EXCEPT OLEFIN *(CONTINUED)*

THOUSAND METRIC TONS

	ACTUAL PRODUCTION								
	1985			1986			1987		
COUNTRY	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
U.S.A.	**1286.3**	**1577.9**	**2864.2**	**1260.2**	**1658.6**	**2918.8**	**1304.5**	**1789.8**	**3094.3**
CANADA	**75.1**	**58.0**	**133.1**	**75.3**	**64.3**	**139.6**	**71.5**	**58.2**	**129.7**
OTHER AMERICAS									
ARGENTINA	27.1	16.8	43.9	30.7	24.4	55.1	27.9	29.4	57.3
BRAZIL	121.7	95.8	217.5	134.8	102.2	237.0	136.3	111.8	248.1
CHILE	4.1	2.0	6.1	4.0	2.3	6.3	4.4	2.7	7.1
COLOMBIA	38.3	9.9	48.2	38.1	9.2	47.3	38.6	10.8	49.4
COSTA RICA	3.5	0	3.5	4.2	0	4.2	4.2	0	4.2
ECUADOR	4.9	0	4.9	5.8	0	5.8	5.6	0	5.6
MEXICO	155.5	150.4	305.9	134.7	161.6	296.3	125.3	207.9	333.2
PERU	11.3	33.0	44.3	11.6	34.5	46.1	11.9	33.5	45.4
URUGUAY	1.8	4.0	5.8	1.8	3.2	5.0	2.0	3.4	5.4
VENEZUELA	12.5	6.0	18.5	13.4	10.5	23.9	14.3	21.9	36.2
TOTAL OTHER AMERICAS	**380.7**	**317.9**	**698.6**	**379.1**	**347.9**	**727.0**	**370.5**	**421.4**	**791.9**
JAPAN	**645.4**	**757.3**	**1402.7**	**605.2**	**750.4**	**1355.6**	**608.8**	**731.8**	**1340.6**
CHINA, PRC	**134.9**	**597.1**	**732.0**	**153.8**	**593.6**	**747.4**	**209.0**	**637.0**	**846.0**
OTHER ASIA									
BANGLADESH	0.5	0	0.5	0.5	0	0.5	0.5	0	0.5
INDIA	127.5	66.2	193.7	139.1	81.6	220.7	160.3	105.7	266.0
INDONESIA	76.9	70.3	147.2	86.2	78.0	164.2	107.0	80.9	187.9
KOREA, REP. OF	408.7	402.9	811.6	436.5	425.9	862.4	479.5	490.6	970.1
MALAYSIA	0	38.8	38.8	0	37.9	37.9	0	38.9	38.9
PAKISTAN	20.0	23.0	43.0	25.8	24.4	50.2	27.8	25.4	53.2
PHILIPPINES	22.0	12.2	34.2	20.0	15.0	35.0	23.0	12.7	35.7
SRI LANKA	1.2	0	1.2	1.3	0	1.3	1.5	0	1.5
TAIWAN	509.5	514.1	1023.6	605.6	626.5	1232.1	715.1	676.2	1391.3
THAILAND	42.6	55.0	97.6	40.0	57.0	97.0	51.3	67.2	118.5
TOTAL OTHER ASIA	**1208.9**	**1182.5**	**2391.4**	**1355.0**	**1346.3**	**2701.3**	**1566.0**	**1497.6**	**3063.6**
MIDDLE EAST, AFRICA & OCEANIA									
AUSTRALIA/N.Z.	14.6	1.0	15.6	16.3	1.0	17.3	16.0	1.1	17.1
EGYPT	5.6	27.6	33.2	6.3	30.6	36.9	6.9	32.1	39.0
IRAN	13.5	25.0	38.5	9.5	26.0	35.5	9.5	25.9	35.4
ISRAEL	13.7	7.3	21.0	10.5	8.0	18.5	11.5	10.0	21.5
KENYA	5.1	0	5.1	5.1	1.0	6.1	5.0	1.1	6.1
NIGERIA	3.2	3.0	6.2	3.5	3.1	6.6	4.0	3.1	7.1
SOUTH AFRICA	52.8	27.4	80.2	54.2	29.5	83.7	54.8	35.3	90.1
TANZANIA	2.0	0	2.0	2.5	0	2.5	3.0	0	3.0
TOTAL M.E., A. & O.	**110.5**	**91.3**	**201.8**	**107.9**	**99.2**	**207.1**	**110.7**	**108.6**	**219.3**
TOTAL WORLD	**5577.9**	**6910.7**	**12488.6**	**5693.9**	**7245.5**	**12939.4**	**6040.2**	**7704.3**	**13744.5**

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
1340.9	1806.0	3146.9	1346.4	1773.0	3119.4	1526.4	1974.1	3500.5	1608.0	2070.7	3678.7
76.1	59.2	135.3	65.2	59.6	124.8	108.4	73.0	181.4	108.4	73.0	181.4
27.1	20.4	47.5	23.9	19.8	43.7	48.3	40.6	88.9	48.3	40.6	88.9
125.8	113.9	239.7	132.2	114.2	246.4	175.7	136.1	311.8	175.7	151.1	326.8
4.6	2.8	7.4	4.8	3.0	7.8	7.7	15.0	22.7	7.7	15.0	22.7
36.0	12.9	48.9	38.6	12.5	51.1	59.2	26.5	85.7	60.0	41.5	101.5
4.3	0	4.3	0	0	0	0	0	0	0	0	0
6.5	0	6.5	6.5	0	6.5	7.2	0	7.2	7.2	0	7.2
132.3	213.6	345.9	118.7	217.5	336.2	180.9	266.0	446.9	194.9	359.0	553.9
12.2	31.6	43.8	13.6	32.9	46.5	19.8	38.0	57.8	19.8	38.0	57.8
2.1	3.6	5.7	2.2	3.9	6.1	5.0	5.5	10.5	5.0	5.5	10.5
18.1	20.9	39.0	19.3	21.4	40.7	24.7	37.0	61.7	24.7	37.0	61.7
369.0	419.7	788.7	359.8	425.2	785.0	528.5	564.7	1093.2	543.3	687.7	1231.0
618.9	733.0	1351.9	656.9	720.3	1377.2	834.0	926.0	1760.0	887.0	926.0	1813.0
407.6	666.7	1074.3	412.0	763.0	1175.0	454.0	1005.0	1459.0	480.0	1052.0	1532.0
0.6	0	0.6	0.6	0	0.6	1.0	0	1.0	1.0	18.0	19.0
200.1	121.5	321.6	205.0	137.5	342.5	323.0	299.0	622.0	490.0	432.0	922.0
108.2	86.6	194.8	122.0	105.0	227.0	184.0	205.0	389.0	214.7	225.0	439.7
580.3	534.7	1115.0	628.8	561.0	1189.8	705.4	630.0	1335.4	800.4	671.0	1471.4
0	40.0	40.0	0	45.0	45.0	0	50.0	50.0	0	50.0	50.0
18.2	32.3	50.5	18.0	26.0	44.0	31.0	72.0	103.0	40.0	110.0	150.0
24.5	15.0	39.5	25.3	17.0	42.3	35.0	25.0	60.0	42.0	50.0	92.0
1.5	0	1.5	2.0	0	2.0	3.0	0	3.0	3.0	0	3.0
732.7	697.5	1430.2	783.5	739.6	1523.1	929.3	915.4	1844.7	1054.0	949.4	2003.4
56.0	74.4	130.4	60.0	85.0	145.0	75.2	141.6	216.8	164.2	213.6	377.8
1722.1	1602.0	3324.1	1845.2	1716.1	3561.3	2286.9	2338.0	4624.9	2809.3	2719.0	5528.3
15.2	1.2	16.4	17.0	1.2	18.2	18.5	1.5	20.0	18.5	1.5	20.0
8.2	34.2	42.4	9.4	38.4	47.8	19.0	80.0	99.0	22.0	110.0	132.0
9.9	25.0	34.9	10.3	30.0	40.3	40.0	45.0	85.0	44.0	50.0	94.0
12.0	8.0	20.0	12.4	0	12.4	15.0	0	15.0	15.0	0	15.0
5.0	1.1	6.1	4.9	1.1	6.0	17.0	3.0	20.0	17.0	3.0	20.0
4.5	3.1	7.6	4.5	3.2	7.7	12.0	5.0	17.0	20.0	5.0	25.0
60.7	35.2	95.9	61.4	35.9	97.3	74.0	41.7	115.7	74.0	44.7	118.7
3.0	0	3.0	3.0	0	3.0	5.0	0	5.0	5.0	0	5.0
118.5	107.8	226.3	122.9	109.8	232.7	200.5	176.2	376.7	215.5	214.2	429.7
6542.2	7820.8	14363.0	6718.4	7998.2	14716.6	8319.1	10215.0	18534.1	9066.4	10994.1	20060.5

TABLE 4:
WORLDWIDE ARTIFICIAL (CELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY
THOUSAND METRIC TONS

	ACTUAL PRODUCTION								
	1985			1986			1987		
COUNTRY	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
WESTERN EUROPE [a]									
AUSTRIA	14.9	109.0	123.9	DETAIL NO LONGER AVAILABLE		123.0	DETAIL NO LONGER AVAILABLE		120.0
BELGIUM/NETHERLANDS	42.0	0	42.0			40.0			40.0
FINLAND	0	60.0	60.0			55.0			54.0
FRANCE	7.0	15.0	22.0			21.0			23.0
GERMANY, FED. REP.	64.0	55.0	119.0			119.0			118.0
GREECE	7.0	0	7.0			7.7			7.8
ITALY	30.2	0	30.2			30.0			29.0
PORTUGAL	1.0	0	1.0			0.9			1.2
SPAIN	7.5	30.0	37.5			37.0			35.0
SWEDEN	0	33.0	33.0			22.1			23.0
TURKEY	1.0	7.0	8.0			8.0			8.0
UNITED KINGDOM	19.0	60.2	79.2			58.0			55.0
TOTAL WESTERN EUROPE	**193.6**	**369.2**	**562.8**	**190.6**	**331.1**	**521.7**	**185.0**	**329.0**	**514.0**
EASTERN EUROPE									
BULGARIA	4.1	37.6	41.7	4.2	38.0	42.2	4.3	0	4.3
CZECHOSLOVAKIA	20.9	39.6	60.5	18.0	37.2	55.2	18.4	36.8	55.2
GERMANY, DEM. REP.	35.4	132.4	167.8	35.6	122.1	157.7	35.9	120.7	156.6
HUNGARY	0	5.5	5.5	0	5.5	5.5	0	4.1	4.1
POLAND	20.5	50.6	71.1	19.1	52.9	72.0	19.3	54.0	73.3
ROMANIA	8.8	53.0	61.8	9.0	55.0	64.0	9.0	57.0	66.0
USSR	246.0	340.0	586.0	246.0	343.0	589.0	246.5	345.0	591.5
YUGOSLAVIA	14.9	55.0	69.9	15.1	56.0	71.1	13.3	50.0	63.3
TOTAL EASTERN EUROPE	**350.6**	**713.7**	**1064.3**	**347.0**	**709.7**	**1056.7**	**346.7**	**667.6**	**1014.3**
TOTAL EUROPE	**544.2**	**1082.9**	**1627.1**	**537.6**	**1040.8**	**1578.4**	**531.7**	**996.6**	**1528.3**

Y Yarn+monofilaments.

S Staple+tow+fiberfill.

a. Starting in 1986 country detail is no longer available due to disclosure.

These totals do not include data for the Indonesian pilot plant nor production of artificial (cellulosic) fiber in North Korea.

Production and producing capacity by country, divided between rayon and acetate yarn, is given on pages 116 - 117.

Also note page 120 for data on production of cigarette tow.

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
DETAIL NO LONGER AVAILABLE		132.0	DETAIL NO LONGER AVAILABLE		136.0	DETAIL NO LONGER AVAILABLE		*135.0*	DETAIL NO LONGER AVAILABLE		*135.0*
		41.0			40.0			*43.0*			*43.0*
		60.4			64.8			*65.0*			*69.0*
		15.0			2.0			*3.0*			*3.0*
		122.0			129.0			*129.0*			*129.0*
		7.2			7.5			*8.0*			*8.0*
		32.0			35.0			*43.0*			*43.0*
		0.8			0.9			*2.0*			*2.0*
		37.0			40.0			*39.0*			*42.0*
		20.0			20.3			*20.5*			*25.0*
		8.7			9.3			*10.0*			*10.0*
		64.0			55.0			*70.0*			*75.0*
191.0	**349.1**	**540.1**	**197.0**	**342.8**	**539.8**	***207.5***	***360.0***	***567.5***	***212.0***	***372.0***	***584.0***
4.4	0	4.4	4.4	0	4.4	*5.0*	*42.0*	*47.0*	*5.0*	*42.0*	*47.0*
18.9	39.4	58.3	11.9	29.1	41.0	*27.0*	*46.0*	*73.0*	*27.0*	*46.0*	*73.0*
36.3	118.8	155.1	38.4	131.9	170.3	*39.0*	*160.0*	*199.0*	*39.0*	*160.0*	*199.0*
0	4.2	4.2	0	4.3	4.3	*10.0*	*10.0*	*20.0*	*10.0*	*20.0*	*30.0*
20.2	54.0	74.2	16.9	44.2	61.1	*23.0*	*71.5*	*94.5*	*23.0*	*71.5*	*94.5*
9.1	66.5	75.6	9.0	61.6	70.6	*11.0*	*88.0*	*99.0*	*11.0*	*88.0*	*99.0*
263.8	337.2	601.0	245.1	338.9	584.0	*290.0*	*353.0*	*643.0*	*340.0*	*353.0*	*693.0*
14.0	54.0	68.0	14.9	56.2	71.1	*17.0*	*60.0*	*77.0*	*17.0*	*63.0*	*80.0*
366.7	**674.1**	**1040.8**	**340.6**	**666.2**	**1006.8**	***422.0***	***830.5***	***1252.5***	***472.0***	***843.5***	***1315.5***
557.7	**1023.2**	**1580.9**	**537.6**	**1009.0**	**1546.6**	***629.5***	***1190.5***	***1820.0***	***684.0***	***1215.5***	***1899.5***

TABLE 4:
WORLDWIDE ARTIFICIAL (CELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY *(CONTINUED)*

THOUSAND METRIC TONS

	ACTUAL PRODUCTION								
	1985			1986			1987		
COUNTRY	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
U.S.A.	**92.8**	**160.2**	**253.0**	**97.4**	**183.3**	**280.7**	**86.7**	**187.9**	**274.6**
CANADA	**8.0**	**26.9**	**34.9**	**8.8**	**29.1**	**37.9**	**13.0**	**28.5**	**41.5**
OTHER AMERICAS									
ARGENTINA	1.5	1.5	3.0	3.0	4.9	7.9	3.3	2.5	5.8
BRAZIL	20.1	26.5	46.6	16.8	33.6	50.4	15.0	33.9	48.9
CHILE	1.3	3.8	5.1	1.3	3.9	5.2	1.3	4.0	5.3
COLOMBIA	1.8	0	1.8	1.8	0	1.8	2.3	0	2.3
CUBA	2.1	6.4	8.5	2.6	8.7	11.3	1.7	8.8	10.5
MEXICO	12.6	0	12.6	12.0	0	12.0	11.4	0	11.4
PERU	1.7	0	1.7	0.8	0	0.8	1.1	0	1.1
URUGUAY	1.0	0	1.0	1.3	0	1.3	1.2	0	1.2
VENEZUELA	2.1	0	2.1	1.5	0	1.5	2.2	0	2.2
TOTAL OTHER AMERICAS	**44.2**	**38.2**	**82.4**	**41.1**	**51.1**	**92.2**	**39.5**	**49.2**	**88.7**
JAPAN	**104.6**	**283.3**	**387.9**	**102.8**	**217.2**	**320.0**	**99.4**	**201.1**	**300.5**
CHINA, PRC	**51.0**	**130.0**	**181.0**	**53.0**	**130.0**	**183.0**	**55.0**	**132.0**	**187.0**
OTHER ASIA									
BANGLADESH	3.0	1.0	4.0	4.0	1.1	5.1	4.5	1.3	5.8
INDIA	46.9	95.0	141.9	49.6	90.4	140.0	50.7	116.8	167.5
INDONESIA	0	40.7	40.7	0	46.1	46.1	0	52.0	52.0
KOREA, REP. OF	13.8	0	13.8	13.9	0	13.9	14.1	0	14.1
PAKISTAN	3.2	0	3.2	3.2	0	3.2	3.3	0	3.3
PHILLIPPINES	0	0	0	0	0	0	0	0	0
TAIWAN	2.4	119.5	121.9	2.8	117.1	119.9	2.4	117.2	119.6
THAILAND	0	19.0	19.0	0	19.0	19.0	0	21.4	21.4
TOTAL OTHER ASIA	**69.3**	**275.2**	**344.5**	**73.5**	**273.7**	**347.2**	**75.0**	**308.7**	**383.7**
MIDDLE EAST, AFRICA & OCEANIA									
EGYPT	7.0	4.7	11.7	7.0	4.7	11.7	7.0	4.8	11.8
IRAQ	3.0	5.5	8.5	3.0	5.5	8.5	3.1	5.5	8.6
TOTAL M.E., A & O	**10.0**	**10.2**	**20.2**	**10.2**	**10.2**	**20.2**	**10.1**	**10.3**	**20.4**
TOTAL WORLD	**924.1**	**2006.9**	**2931.0**	**924.2**	**1935.4**	**2859.6**	**910.4**	**1914.3**	**2824.7**

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
97.0	**181.3**	**278.3**	**98.7**	**164.6**	**263.3**	**99.3**	**146.5**	**245.8**	**99.3**	**146.5**	**245.8**
13.1	33.2	46.3	13.1	33.5	46.6	14.5	38.0	52.5	24.5	38.0	62.5
3.3	0	3.3	3.5	0	3.5	11.8	5.0	16.8	11.8	5.0	16.8
14.9	36.6	51.5	14.8	40.2	55.0	17.0	41.7	58.7	17.0	41.7	58.7
1.3	4.1	5.4	1.3	4.2	5.5	1.5	5.4	6.9	1.5	5.4	6.9
2.4	0	2.4	2.5	0	2.5	3.5	0	3.5	3.5	0	3.5
0.6	10.6	11.2	0.7	7.6	8.3	1.5	11.0	12.5	1.5	11.0	12.5
12.0	0	12.0	12.2	0	12.2	15.8	0	15.8	15.8	0	15.8
1.3	0	1.3	1.4	0	1.4	1.7	0	1.7	1.7	0	1.7
1.3	0	1.3	1.3	0	1.3	1.9	0	1.9	1.9	0	1.9
2.2	0	2.2	2.3	0	2.3	2.4	0	2.4	2.4	0	2.4
39.3	**51.3**	**90.6**	**40.0**	**52.0**	**92.0**	**57.1**	**63.1**	**120.2**	**57.1**	**63.1**	**120.2**
99.8	**190.8**	**290.6**	**99.0**	**174.0**	**273.0**	**117.4**	**214.9**	**332.3**	**117.4**	**214.9**	**332.3**
53.0	**120.0**	**173.0**	**50.0**	**130.0**	**180.0**	**65.0**	**165.0**	**230.0**	**65.0**	**170.0**	**235.0**
4.8	1.0	5.8	4.8	1.0	5.8	5.4	5.0	10.4	5.4	5.0	10.4
52.6	121.5	174.1	53.0	125.0	178.0	78.9	168.1	247.0	78.9	169.8	248.7
0	59.0	59.0	0	60.0	60.0	0	96.6	96.6	0	167.6	167.6
15.1	0	15.1	15.3	0	15.3	17.0	28.0	45.0	17.0	28.0	45.0
2.8	0	2.8	3.2	0	3.2	3.5	0	3.5	3.5	0	3.5
0	0	0	0	0	0	0	25.0	25.0	0	25.0	25.0
2.6	123.2	125.8	2.6	145.0	147.6	3.2	147.6	150.8	4.0	149.4	153.4
0	24.0	24.0	0	41.2	41.2	0	42.0	42.0	0	42.0	42.0
77.9	**328.7**	**406.6**	**78.9**	**372.2**	**451.1**	**108.0**	**512.3**	**620.3**	**108.8**	**586.8**	**695.6**
7.0	5.0	12.0	7.9	5.2	13.1	8.0	5.4	13.4	8.0	5.4	13.4
2.9	5.5	8.4	3.0	5.6	8.6	3.5	6.5	10.0	3.5	6.5	10.0
9.9	**10.5**	**20.4**	**10.9**	**10.8**	**21.7**	**11.5**	**11.9**	**23.4**	**11.5**	**11.9**	**23.4**
947.7	**1939.0**	**2886.7**	**928.2**	**1946.1**	**2874.3**	**1102.3**	**2342.2**	**3444.5**	**1167.6**	**2446.7**	**3614.3**

TABLE 5:
WORLDWIDE RAYON VS. ACETATE FILAMENT YARN PRODUCTION & PRODUCING CAPACITY BY COUNTRY
THOUSAND METRIC TONS

COUNTRY	ACTUAL PRODUCTION								
	1985			1986			1987		
	H	R&C	A	H	R&C	A	H	R&C	A
WESTERN EUROPE									
AUSTRIA	10	5	0	DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE		
BELGIUM/NETHERLANDS	18	17	7						
FRANCE	0	7	0						
GERMANY, FED. REP. OF	40	24	0						
ITALY [a]	10	2	18						
SPAIN	+	4	3						
UNITED KINGDOM	0	0	19						
OTHER [b]	0	9	0						
TOTAL WESTERN EUROPE	**78**	**68**	**47**	**71**	**69**	**51**	**67**	**70**	**48**
EASTERN EUROPE									
BULGARIA	0	4	0	0	4	0	0	4	0
CZECHOSLOVAKIA	8	13	0	8	10	0	8	10	0
GERMANY, DEM. REP.	13	22	0	14	22	0	14	22	0
HUNGARY	0	0	0	0	0	0	0	0	0
POLAND	5	15	0	5	14	0	5	15	0
ROMANIA	5	4	0	5	4	0	5	4	0
USSR [a]	116	80	50	116	80	50	117	80	50
YUGOSLAVIA	8	7	0	7	8	0	6	7	0
TOTAL EASTERN EUROPE	**156**	**145**	**50**	**155**	**142**	**50**	**155**	**142**	**50**
U.S.A.	**9**	**6**	**78**	**7**	**6**	**84**	**7**	**6**	**74**
CANADA	**0**	**0**	**8**	**0**	**0**	**9**	**0**	**0**	**9**
OTHER AMERICAS									
ARGENTINA	0	0	2	0	0	3	0	0	3
BRAZIL	4	15	1	1	15	0	0	15	0
CHILE	0	1	0	0	1	0	0	1	0
COLOMBIA	0	0	2	0	0	2	0	0	2
CUBA	2	0	0	3	0	0	2	0	0
MEXICO	2	3	7	2	3	7	2	3	6
PERU	0	0	2	0	0	1	0	0	1
URUGUAY	0	0	1	0	0	1	0	0	1
VENEZUELA	0	0	2	0	0	2	0	0	2
TOTAL OTHER AMERICAS	**8**	**19**	**17**	**6**	**19**	**16**	**4**	**19**	**15**
JAPAN [a]	**2**	**74**	**28**	**2**	**74**	**27**	**2**	**71**	**27**
CHINA, PRC	**0**	**51**	**0**	**0**	**53**	**0**	**0**	**55**	**0**
OTHER ASIA									
BANGLADESH	0	3	0	0	1	0	0	5	0
INDIA	7	40	+	5	44	+	5	46	+
KOREA, REP. OF	0	12	2	0	12	2	0	12	2
PAKISTAN	0	0	3	0	0	3	0	0	3
TAIWAN	0	2	0	0	3	0	0	2	0
TOTAL OTHER ASIA	**7**	**57**	**5**	**5**	**63**	**5**	**5**	**65**	**5**
OTHER M.E., A & O [c]	**0**	**10**	**0**	**0**	**10**	**0**	**0**	**10**	**0**
WORLD TOTAL	**260**	**430**	**233**	**246**	**436**	**242**	**240**	**438**	**228**

NA No Longer Available
H High tenacity (tire & industrial type) viscose rayon yarn.
R Regular + intermediate tenacity viscose rayon yarn.
C Cuprammonium rayon yarn.
A Acetate + triacetate yarn.
a. Produces both regular + intermediate rayon yarn and cuprammonium rayon yarn.
b. Comprises Greece, Portugal and Turkey.
c. Comprises Egypt and Iraq.

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
H	R&C	A	H	R&C	A	H	R&C	A	H	R&C	A
DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE		
75	66	50	79	67	51	87	68	53	87	71	54
0	4	0	0	4	0	*0*	*5*	*0*	*0*	*5*	*0*
8	11	0	5	7	0	*11*	*16*	*0*	*11*	*16*	*0*
14	23	0	15	24	0	*15*	*24*	*0*	*15*	*24*	*0*
0	0	0	0	0	0	*0*	*10*	*0*	*0*	*10*	*0*
5	16	0	4	13	0	*0*	*23*	*0*	*0*	*23*	*0*
5	4	0	5	4	0	*6*	*5*	*0*	*6*	*5*	*0*
119	85	60	104	91	50	*120*	*100*	*70*	*150*	*120*	*70*
6	7	0	7	8	0	*8*	*9*	*0*	*8*	*9*	*0*
157	**150**	**60**	**140**	**151**	**50**	***160***	***192***	***70***	***190***	***212***	***70***
7	**6**	**84**	**NA**	**NA**	**NA**	***NA***	***NA***	***NA***	***NA***	***NA***	***NA***
0	**0**	**9**	**NA**	**NA**	**NA**	***NA***	***NA***	***NA***	***NA***	***NA***	***NA***
0	0	3	0	0	4	*2*	*6*	*4*	*2*	*6*	*4*
0	15	0	0	15	0	*0*	*17*	*0*	*0*	*17*	*0*
0	1	0	0	1	0	*0*	*1*	*0*	*0*	*1*	*0*
0	0	2	0	0	3	*0*	*0*	*4*	*0*	*0*	*4*
2	0	0	1	0	0	*1*	*0*	*0*	*1*	*0*	*0*
2	4	6	2	4	6	*3*	*4*	*9*	*3*	*4*	*9*
0	0	1	0	0	1	*0*	*0*	*2*	*0*	*0*	*2*
0	0	1	0	0	1	*0*	*0*	*2*	*0*	*0*	*2*
0	0	2	0	0	2	*0*	*0*	*2*	*0*	*0*	*2*
4	**20**	**15**	**3**	**20**	**17**	***6***	***28***	***23***	***6***	***28***	***23***
1	**72**	**27**	**+**	**73**	**26**	***0***	***85***	***33***	***0***	***85***	***33***
0	**53**	**0**	**0**	**50**	**0**	***0***	***65***	***0***	***0***	***65***	***0***
0	4	0	0	5	0	*0*	*5*	*0*	*0*	*5*	*0*
9	44	0	9	44	0	*21*	*54*	*4*	*21*	*54*	*4*
0	12	3	0	11	4	*0*	*12*	*5*	*0*	*12*	*5*
0	0	3	0	0	3	*0*	*0*	*4*	*0*	*0*	*4*
0	3	0	0	3	0	*0*	*3*	*0*	*0*	*4*	*0*
9	**63**	**6**	**9**	**63**	**7**	***21***	***74***	***13***	***21***	***75***	***13***
0	**10**	**0**	**0**	**11**	**0**	***0***	***12***	***0***	***0***	***12***	***0***
253	**440**	**251**	**NA**	**NA**	**NA**	***NA***	***NA***	***NA***	***NA***	***NA***	***NA***

TABLE 6:
WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY FIBER EXCEPT OLEFIN
THOUSAND METRIC TONS

FIBER & AREA	ACTUAL PRODUCTION								
	1985			1986			1987		
	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
ACRYLIC+MODACRYLIC									
WEST EUROPE	1	925	926	1	939	940	1	948	949
EAST EUROPE	0	245	245	0	257	257	0	281	281
U.S.A.	0	286	286	0	279	279	0	268	268
CANADA	0	0	0	0	0	0	0	0	0
OTHER AMERICAS	0	134	134	0	154	154	0	181	181
JAPAN	2	380	382	3	394	397	3	404	407
CHINA, PRC	0	73	73	0	74	74	0	75	75
OTHER ASIA	0	319	319	0	327	327	0	344	344
MIDDLE EAST, AFRICA & OCEANIA	0	16	16	0	18	18	0	20	20
TOTAL	**3**	**2378**	**2381**	**4**	**2442**	**2446**	**4**	**2521**	**2525**
NYLON+ARAMID [a]									
WEST EUROPE	532	152	684	517	141	658	518	137	655
EAST EUROPE	539	93	632	548	99	647	566	100	666
U.S.A.	687	375	1062	728	412	1140	770	450	1220
CANADA	54	12	66	54	14	68	51	13	64
OTHER AMERICAS	175	8	183	170	11	181	165	10	175
JAPAN	291	24	315	260	19	279	262	17	279
CHINA, PRC	70	1	71	74	1	75	79	1	80
OTHER ASIA	367	5	372	387	4	391	426	6	432
MIDDLE EAST, AFRICA & OCEANIA	56	1	57	57	1	58	58	1	59
TOTAL	**2771**	**671**	**3442**	**2795**	**702**	**3497**	**2895**	**735**	**3630**
POLYESTER									
WEST EUROPE	451	493	944	447	507	954	451	510	961
EAST EUROPE	207	409	616	239	430	669	257	473	730
U.S.A.	599	917	1516	532	968	1500	535	1071	1606
CANADA	21	46	67	21	50	71	20	45	65
OTHER AMERICAS	205	176	381	208	183	391	205	230	435
JAPAN	329	323	652	322	310	632	323	283	606
CHINA, PRC	55	443	498	70	456	526	120	496	616
OTHER ASIA	841	858	1699	968	1015	1983	1140	1145	2285
MIDDLE EAST, AFRICA & OCEANIA	55	74	129	51	81	132	53	88	141
TOTAL	**2763**	**3739**	**6502**	**2858**	**4000**	**6858**	**3104**	**4341**	**7445**
OTHER FIBERS EXCEPT OLEFIN [b]									
WEST EUROPE	6	9	15	5	9	14	5	9	14
EAST EUROPE	1	3	4	1	3	4	1	3	4
U.S.A.	+	+	+	+	+	+	+	+	+
CANADA	+	0	+	+	0	+	+	0	+
OTHER AMERICAS	1	0	1	1	0	1	1	0	1
JAPAN	23	30	53	20	27	47	20	28	48
CHINA, PRC	10	80	90	10	63	73	10	65	75
OTHER ASIA	+	1	1	+	1	1	0	2	2
MIDDLE EAST, AFRICA & OCEANIA	0	0	0	0	0	0	0	0	0
TOTAL	**41**	**123**	**164**	**37**	**103**	**140**	**37**	**107**	**144**
TOTAL FIBERS ABOVE									
WEST EUROPE	990	1579	2569	970	1596	2566	975	1604	2579
EAST EUROPE	747	750	1497	788	789	1577	824	857	1681
U.S.A.	1286	1578	2864	1260	1659	2919	1305	1789	3094
CANADA	75	58	133	75	64	139	71	58	129
OTHER AMERICAS	381	318	699	379	348	727	371	421	792
JAPAN	645	757	1402	605	750	1355	608	732	1340
CHINA, PRC	135	597	732	154	594	748	209	637	846
OTHER ASIA	1208	1183	2391	1355	1347	2702	1566	1497	3063
MIDDLE EAST, AFRICA & OCEANIA	111	91	202	108	100	208	111	109	220
WORLD TOTAL	**5578**	**6911**	**12489**	**5694**	**7247**	**12941**	**6040**	**7704**	**13744**

Y Yarn+monofilaments.
S Staple+tow+fiberfill.
+ Nominal quantities.

a. U.S.A. nylon producing capacity data do not include aramid.

b. Other fibers are alginate, azlon, spandex or elastomer, saran, TFE-fluorocarbon, vinal and vinyon. U.S.A. production data do not include spandex.

ACTUAL PRODUCTION						PRODUCING CAPACITY						% UTILIZATION[c]	
1988			1989			3/1990			12/1991				
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S
1	875	876	1	793	794	1	1084	1085	1	1097	1098	100.0	73.5
0	277	277	0	288	288	0	398	398	0	430	430	0	72.5
0	267	267	0	246	246	0	291	291	0	295	295	0	84.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	181	181	0	181	181	0	224	224	0	272	272	0	82.8
3	395	398	3	363	366	6	426	432	6	426	432	50.0	83.6
0	77	77	0	100	100	0	125	125	0	152	152	0	80.0
0	351	351	0	363	363	0	438	438	0	516	516	0	84.8
0	17	17	0	14	14	0	20	20	0	41	41	0	70.0
4	**2440**	**2444**	**4**	**2348**	**2352**	**7**	**3006**	**3013**	**7**	**3229**	**3236**	**57.1**	**78.5**
548	137	685	557	148	705	676	202	878	671	200	871	83.7	74.9
582	103	685	580	104	684	693	124	817	724	127	851	84.2	85.2
784	427	1211	798	445	1243	935	518	1453	964	527	1491	88.1	85.8
54	13	67	56	16	72	97	24	121	97	24	121	57.7	66.7
160	7	167	149	8	157	239	14	253	239	14	253	58.2	43.2
267	15	282	266	16	282	320	27	347	373	27	400	82.7	59.3
93	1	94	104	1	105	119	20	139	145	25	170	90.8	8.0
468	6	474	470	6	476	615	18	633	734	18	752	78.0	46.2
61	1	62	64	1	65	105	3	108	105	3	108	62.1	28.6
3017	**710**	**3727**	**3044**	**745**	**3789**	**3799**	**950**	**4749**	**4052**	**965**	**5017**	**81.1**	**79.6**
474	539	1013	487	596	1083	627	628	1255	625	656	1281	78.9	95.0
278	483	761	276	492	768	373	702	1075	385	722	1107	77.7	72.5
557	1112	1669	548	1082	1630	591	1165	1756	644	1248	1892	90.2	92.0
22	46	68	9	44	53	11	49	60	11	49	60	81.8	86.3
208	231	439	210	236	446	287	327	614	302	402	704	70.7	76.6
329	293	622	367	308	675	478	374	852	478	374	852	77.6	82.8
307	530	837	300	600	900	320	785	1105	320	800	1120	93.8	82.2
1254	1244	2498	1376	1346	2722	1671	1882	3553	2074	2185	4259	83.4	74.9
57	90	147	59	95	154	96	153	249	111	170	281	55.9	64.0
3486	**4568**	**8054**	**3632**	**4799**	**8431**	**4454**	**6065**	**10519**	**4950**	**6606**	**11556**	**81.7**	**81.5**
5	9	14	9	9	18	10	12	22	8	12	20	100.0	75.0
1	3	4	1	2	3	1	8	9	1	8	9	100.0	25.0
+	+	+	+	+	+	+	+	+	+	+	+	0	0
+	0	+	+	0	+	+	0	+	+	0	+	0	0
1	0	1	1	0	1	2	0	2	2	0	2	66.7	0
20	30	50	20	32	52	30	99	129	30	99	129	66.7	32.3
8	59	67	8	62	70	15	75	90	15	75	90	53.3	82.7
0	2	2	0	1	1	0	1	1	0	1	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	**103**	**138**	**39**	**106**	**145**	**58**	**195**	**253**	**56**	**195**	**251**	**67.8**	**54.6**
1028	1560	2588	1054	1546	2600	1314	1926	3240	1305	1965	3270	81.5	80.7
861	866	1727	857	886	1743	1067	1232	2299	1110	1287	2397	82.0	73.5
1341	1806	3147	1346	1773	3119	1526	1974	3500	1608	2070	3678	88.9	89.3
76	59	135	65	60	125	108	73	181	108	73	181	60.2	80.0
369	419	788	360	425	785	528	565	1093	543	688	1231	64.9	78.0
619	733	1352	656	719	1375	834	926	1760	887	926	1813	79.0	77.1
408	667	1075	412	763	1175	454	1005	1459	480	1052	1532	91.7	81.0
1722	1603	3325	1846	1716	3562	2287	2338	4625	2809	2719	5528	81.9	76.7
118	108	226	123	110	233	201	176	377	216	214	430	59.0	64.0
6542	**7821**	**14363**	**6719**	**7998**	**14717**	**8318**	**10216**	**18534**	**9065**	**10995**	**20060**	**81.4**	**79.9**

c. Based on 1989 production and average March 1989 vs. March 1990 producing capacity. Refer to June 1989 ***Fiber Organon*** for March 1989 producing capacity.

The regional totals here are the same as those on pages 108 - 111

TABLE 7:
WORLDWIDE GLASS FIBER PRODUCTION & PRODUCING CAPACITY
THOUSAND METRIC TONS

COUNTRY	PRODUCTION					CAPACITY	
	1985	1986	1987	1988	1989	3/90	12/91
WEST EUROPE	320	364	407	465	470	440	540
EAST EUROPE [a]						100	110
U.S.A.	610	630	725	730	735	826	928
OTHER AMERICAS	32	35	50	65	65	80	95
JAPAN	273	240	300	340	345	350	360
MIDDLE EAST, AFRICA & OCEANIA [b]	28	30	35	55	65	80	95
TOTAL ABOVE	1263	1299	1517	1655	1680	1876	2128
CHINA P.R.C.	50	50	55	65	70	100	110
U.S.S.R.	85	100	110	125	133	200	200

Glass fiber is defined on page122 of this issue. The glass fiber producing capacity, is based on March 1990 and December 1991 annual projections.

a. The data for East Europe do not include estimates for the U.S.S.R.

b. The Other Asia, Africa & Oceania countries are Australia, India, Korea, Rep. of, South Africa and Taiwan.

TABLE 8:
ESTIMATED WORLDWIDE CIGARETTE TOW PRODUCTION
THOUSAND METRIC TONS

AREA	1985	1986	1987	1988	1989
EUROPE [a]	83	104	107	124	127
U.S.A.	210	216	247	249	265
OTHER AMERICAS [b]					
ASIA [c]	44	42	46	49	55
WORLD TOTAL	**337**	**362**	**400**	**422**	**447**

a. Belgium, Germany, Fed. Rep., U.S.S.R. & United Kingdom.

b. Brazil, Canada, Colombia, Mexico & Venezuela.

c. Japan and Korea, Rep. of.

TABLE 9:
WORLDWIDE OLEFIN FIBER PRODUCTION
THOUSAND METRIC TONS

COUNTRY	1985	1986	1987	1988	1989
WEST EUROPE					
AUSTRIA	24	26	27	30	32
BENELUX	120	141	160	165	170
DENMARK	25	26	30	32	34
FINLAND	24	24	18	19	20
FRANCE	50	55	58	70	75
GREECE/CYPRUS	14	15	16	17	18
GERMANY, FED. REP.	99	104	115	135	145
IRELAND	9	9	10	10	10
ITALY	127	130	130	135	135
NORWAY	4	4	5	4	5
PORTUGAL	30	30	36	37	38
SPAIN	37	41	49	53	56
SWEDEN	6	6	6	7	8
SWITZERLAND	14	17	20	22	21
TURKEY	6	6	7	7	10
UNITED KINGDOM	95	110	125	140	145
TOTAL WEST EUROPE	**684**	**744**	**812**	**883**	**922**
EAST EUROPE					
CZECHOSLOVAKIA	12	12	12	12	13
HUNGARY	17	20	22	26	28
POLAND	16	17	17	17	20
U.S.S.R.	22	24	24	25	25
U.S.A.					
YARN+MONOFIL	192	213	224	251	268
STAPLE	137	152	164	165	173
FILM FIBER	233	263	291	293	288
CANADA	48	55	61	62	66
OTHER AMERICAS					
ARGENTINA	15	19	24	18	15
BRAZIL	39	40	40	77	82
CHILE	5	6	7	6	7
COLOMBIA	0	0	3	3	3
EL SALVADOR GUATEMALA HONDURAS }	3	3	3	3	3
MEXICO	26	27	27	28	28
NICARAGUA	1	1	1	1	1
PERU	6	7	7	7	7
URUGUAY	2	2	2	2	2
JAPAN					
YARN+MONOFIL	14	11	14	16	20
STAPLE	35	37	36	38	38
FILM FIBER	NA	NA	NA	NA	NA
OTHER ASIA					
KOREA, REP. OF	1	0	0	0	0
PHILIPPINES	3	3	3	3	3
TAIWAN	71	77	78	79	90
MIDDLE EAST, AFRICA & OCEANIA					
AUSTRALIA	23	25	26	26	28
SOUTH AFRICA	5	5	5	5	10
OTHER	1	1	1	1	1

The olefin data shown include the "official" country data published by a government, an association or other statistical agency as well as an estimate of the olefin fiber, mainly slit and split film fiber, believed to have been produced in the country. For example: although U.S. olefin production data include yarn, monofil, staple, film fiber, and spunbonded polypropylene, published Italian and Japanese olefin data show the production of yarn+monofilaments and staple+tow but no data on production of film fiber, such as that used in sacks, fishing nets, and carpet backing. Estimates were made in the latter example.

Due to the inconsistencies in olefin production reporting, we have made no attempt to show a worldwide total.

1990 WORLDWIDE DIRECTORY OF MANUFACTURED FIBER PRODUCERS

NOTES & DEFINITIONS

This directory of producers lists each country separately and is divided into the following categories:

(1) Artificial (Cellulosic) plus
Synthetic (Noncellulosic) fibers
(2) Olefin fiber
(3) Glass fiber

The locality shown represents a plant site.

The generic fiber names used in this survey are those established by the U.S. Federal Trade Commission (FTC). The *italicized* words are trademarks. All other fiber names are generic and appear in regular type.

● Indicates a company producing olefin fiber as well as other manufactured fiber(s). For example, Mitsubishi Rayon Co. produces olefin fiber in Japan as well as acrylic and polyester. The acrylic and polyester entries for this company are in one section and the olefin entry is shown in the Olefin fiber section.

• Indicates a new plant, in the planning stage or under construction, or a new facility for producing a new product at an existing plant. Such facilities are not expected to be operable until 1991 or later.

Yarn means filament yarn.

Monofil means an extruded monofilament and may be either a round or rectangular (ribbon) cross-section. Monofilaments for bristles are excluded.

Film includes **Slit**: tape produced by slitting an already attenuated wide sheet of olefin film; and **Split:** fibrillated slit film.

Not Included in this survey is the slit film used for decorative or tying ribbon and such.

Captive means that most or all of the fiber produced is consumed by the company in a vertical operation.

GENERIC NAMES & TRADEMARKS

The following are generic names, in bold type, and a brief description of the fibers covered by each name is shown in regular type.

GLASS FIBER

This fiber is made in two primary forms: continuous strand and staple sliver. Continuous strand is drawn fiber (i.e., from a textile-type bushing), while staple sliver, which is produced in relatively small amounts, is a blown fiber.

Glass fiber is produced and sold as filament yarn, strand, roving, mat, chopped strand, milled fiber and staple yarn & sliver. In addition, there are two primary uses for glass fiber: Textile, used by textile mills in conventional constructions (e.g., drapery and tire cord) or Non-Textile, used for nonconventional constructions (e.g., reinforced plastics and roofing shingles).

For additional information, see the definitions on page 243 of the November 1989 ***Fiber Organon***.

ARTIFICIAL (CELLULOSIC) FIBERS

Acetate: Cellulose acetate. Cigarette filtration tow is excluded.

Triacetate: Cellulose acetate, wherein not less than 92% of the hydroxyl groups are acetylated.

Rayon: Regenerated cellulose, including substitutions for not more than15% of the hydrogens of the hydroxyl groups. Includes high wet modulus fiber.

Cupra: Cuprammonium rayon.

The viscose rayon yarns are identified as **ind** (industrial or high tenacity yarn) and **reg** (regular or textile yarn).

SYNTHETIC (NONCELLULOSIC) FIBERS

Acrylic: At least 85% acrylonitrile by weight.

Modacrylic: 35% to 84% acrylonitrile by weight, except when it qualifies as rubber.

Azlon: Regenerated natural protein.

Nylon: A long-chain synthetic polyamide in which less than 85% of the amide linkages are attached directly to two aromatic rings. The types are identified as 6, 66, etc. Where a company produces both type 6 and 66, the designation 6/66 is used.

Aramid: A long-chain synthetic polyamide in which at least 85% of the amide linkages are attached directly to two aromatic rings.

Olefin: At least 85% ethylene, propylene or other olefin units by weight, except amorphous (noncrystalline) polyolefins qualifying as rubber. **E** means Polyethylene and **P** means Polypropylene. Also see adjoining notes on olefin fiber.

Polyester: At least 85% by weight of an ester of a substituted aromatic carboxylic acid, including but not restricted to substituted terephthalate units, and parasubstituted hydroxybenzoate units.

Saran: At least 80% vinylidene chloride by weight.

Spandex: At least 85% of segmented polyurethane.

Vinal: At least 50% by weight vinyl alcohol and wherein the vinyl alcohol plus acetal units are at least 85% by weight.

Vinyon: At least 85% vinyl chloride by weight.

Other manufactured fibers included in this survey, but not listed by the FTC, are **Polycarbonate** (U.S.A.), **Polychlal** (Japan), **Promix** (Japan) and **TFE-&FEP-fluorocarbon** (Fluoro)(Japan, U.S.A. & U.S.S.R.).

Not covered in this survey are fibers which would fall under the FTC's generic designations of rubber, lastrile, metallic and novoloid. Fibers falling under the FTC designations of anidex and nytril are no longer produced.

Carbon fibers are not included in this survey.

International Standard #2076, "Generic Names of Man-Made Fibres," as established by the International Organization for Standardization, lists some 23 names, of which the following are similar to the FTC designations: cupro, viscose, acetate, triacetate, acrylic, modacrylic, nylon or polyamide, polyester and glass. The IOS also lists modal (regenerated cellulose obtained by processes giving a high tenacity and a high wet modulus), alginate (metallic salts of alginic acid), chlorofibre (similar to the FTC's saran and vinyon), elastane (similar to the FTC's spandex), elastodiene, fluorofibre, polycarbamide, polyethylene & polypropylene (similar to the FTC's olefin), polyurethane, trivinyl and vinylal (similar to the FTC's vinal).

ALBANIA

(Producer not yet known)

Polyester	(yarn & staple*)

ARGENTINA

COAFI S.A.

Polyester	Buenos Aires (yarn)

DUCILO S.A.I.C.

Nylon 66	Berazategui & Mercedes *Nylon Ducilo* (yarn)
Spandex	Mercedes (fused multifil or coalesced monofil)

HISISA ARGENTINA S.A.I.C.I.F.

Acrylic	Baradero *Cashmilon* (staple)

MANUFACTURAS DE FIBRAS SYNTETICAS (formerly Petroquimica Sudamericana)

Nylon 6	Olmos - Lapi (yarn)
Polyester	Olmos - Lapi (yarn & staple)

MITEXTIL S.A.

Nylon 6	Buenos Aires (yarn)

M. NAHMIAS S.A.C.I.

Polyester	Buenos Aires (yarn)

NICIEZA y TAVERNA HNOS. S.A.

Nylon 6	Chivilcoy *Grilon* (monofil)

RHODIA ARGENTINA QUIMICA e TEXTIL

Acetate	Quilmes (yarn)
Polyester	Quilmes *Tergal* (yarn)

SOCIEDAD NUEVAS INDUSTRIAS ARGENTINAS FIBRAS ARTIFICIALES S.A.I.C.F.I. (SNIAFA)

Nylon 6	Hernández-La Plata *Snialon* (yarn)

SUDAMTEX S.A. TEXTIL SUDAMERICANA

Polyester	Azul *Acrocel* (staple)

VALENCIANA ARGENTINA S.A.

Nylon 6	Buenos Aires (yarn)

OLEFIN FIBER

AGAPOL S.A. (P yarn)

MANUFACTURA FORTI ARGENTINA S.A.C.I.A.F.I. Buenos Aires (P yarn & staple)

PANAMERICA DE PLASTICOS S.A.I.C. Olivos (P staple)

PETROQUIMICA Cuyo, Mondoza (P yarn)

TEXTILYUTE S.A.I.C. Isidro Casanova (P film)

VINISA S.A.I.C. Buenos Aires *Rafistal, Strofil* (E & P monofil)

GLASS FIBER

VIDRIERIA ARGENTINA S.A. (VASA) Llavallol *Texover*

AUSTRALIA

FIBREMAKERS LTD.

Nylon 66	Bayswater, Victoria *Bri-Nylon* (yarn & monofil), Penrith, N.S.W. (tire cord)
Polyester	Bayswater *Terylene* (yarn, staple & tow)

GEOFABRICS AUSTRALASIA

Polyester	North Albury, N.S.W. *Bidum* (yarn & spun bond)

In addition to the above, **VILENE AUSTRALIA** reportedly produces spunbonded products at Minto, N.S.W.; these are believed to be principally based on artificial (cellulosic) fiber, but some polypropylene may be used.

OLEFIN FIBER

AMOCO CHEMICALS Liverpool, N.S.W. *Poly Bac, Propex* (P yarn & monofil)

BORAL KINNEARS PTY. LTD. Footscray, Victoria *Emu* (P yarn & monofil)

RHEEM AUSTRALIA LTD. Clayton, Victoria *Canvacon, Fabricon, Polytrac, Weedstop, Atlas, Fabcote, Tarpac, Santex* (P yarn, monofil & film)

SARLON INDUSTRIES PTY. LTD. Riverwood, N.S.W. *Sarlon* (E & P yarn & monofil)

OLEFIN FILM FIBER, only

TAPEX PTY. LTD. Sydney, N.S.W.

GLASS FIBER

ACI FIBREGLASS, A Unit of ACI Australia, Ltd. Dandenong, Victoria

AUSTRIA

AUSTRIA FASERWERKE G.m.b.H.

Polyester	Lenzing *Trevira* (staple)

GLANZSTOFF AUSTRIA A.G. (formerly Enka-Austria)

Rayon	St. Pölten (ind & reg yarn)

LENZING A.G. •

Rayon	Lenzing *Lenzing Viscose* (staple) Lenzing *Lenzing Modal* (staple)
Fluoro	Lenzing *Lenzing PTFE* (yarn & staple)
Polyimid	Lenzing* *P84* (yarn & staple)

OLEFIN FIBER

CHEMIE LINZ A.G. Linz *Asota, Linz-PP-Multifil, Linz-PP-Vlies* (P yarn, staple & spunbonded)

LENZING A.G. Lenzing (P yarn)

M. TEUFELBERGER Wels

AUSTRIA (continued)

OLEFIN FILM FIBER, only

SEUTTER Unter Eggendorf

BANGLADESH

ASHUGANJ PETROCHEMICAL COMPLEX

Acrylic	Ashuganj (staple)

BANGLADESH CHEMICAL INDUSTRIES

Rayon	(staple)

KARNAPHULI RAYON AND CHEMICALS LIMITED

Rayon	Chandraghona, Chittagong (reg yarn & staple)

PYLON INDUSTRIES LIMITED

Nylon 6	Fouzdarhat Industrial Estate, Chittagong *Pylon* (yarn)

BELGIUM

BAYER ANTWERPEN N.V.

Nylon 6	Antwerpen *Dorix* (staple)

BEAULIEU-NYLON S.A.

Nylon 6	Kruishoutem, East Flanders (yarn & staple)

FABELTA NINOVE N.V.

Rayon	Ninove, East Flanders (reg yarn)

FABELTA ZWIJNAARDE S.A.

Nylon 66	Zwijnaarde, East Flanders *Fabelnyl* (yarn)

HOECHST CELANESE

Acetate	Lanaken, Limburg (yarn)
Triacetate	Lanaken (yarn)

OLEFIN FIBER

DELOTEX (P staple)

N.V. FIBRILO Zele, East Flanders (P staple & film)

S.A. LA LOKEROISE Lokeren, East Flanders *Alpha Carpet, Delta Carpet* (P yarn & staple)

OSTEND STORES & ROPEWORKS S.A. Ostend, West Flanders

POLYFIL N.V. (Subsidiary of Beaulieu) Wielsbeke (P yarn)

ROGER VANDEN BERGHE N.V. Desselgem (P yarn)

T.T.C. POLYOLEFINS S.A. Overpelt, Limburg (P monofil)

BELGIUM (continued)

OLEFIN FILM FIBER, only

N.V. JONCKVANSTEEN Passendale

S.A. PHORMIUM Zele, East Flanders

POLYTEXCO S.P.R.L. Beveren, Kortryk

S.A. U.C.O. Ledeberg, Gent

GLASS FIBER

N.V. BAYER S.A. Antwerpen

OWENS-CORNING FIBERGLAS EUROPE S.A. Battice, Liége *Fiberglas*

Artificial (cellulosic) production and capacity data are combined with the Netherlands on pages 112 - 115. Synthetic (noncellulosic) production and capacity data are combined with the Netherlands and Luxembourg under "Benelux" on pages 108 - 111.

BOLIVIA

TEJEDURIAS PLANAS DE HILADOS DE FIBRAS ARTIFICIALES Y SINTETICAS "ESTATEX"
La Paz

TEJIDOS DE PUNTO "FENIX"
La Paz

BRAZIL

ARTEPESCA - S.A. ARTIGOS DE PESCA DO NORDESTE *

Nylon 6	Igarassu, Pernambuco (monofil)

BANYLSA TECELAGEM DO BRASIL S.A.

Nylon 6	Aratú, Bahia (yarn)
Polyester	Aratú *Fio Banylsa Poliester* (yarn)

CELBRÁS QÚIMICA E TEXTL S.A.

Acrylic	Camaçari, Bahia *Triana* (staple)
Polyester	Pocos de Caldas, Minas Gerais *Fortrel* (staple)

CIA. NITRO QÚIMICA BRASILEIRA

Rayon	São Miguel Paulista, São Paulo *Viscocel, Novocel* (reg yarn)

COBAFI - CIA. BAHIANA DE FIBRAS

Nylon 6	Camaçari, Bahia (yarn)
Polyester	Camaçari (yarn)

DE MILLUS S.A. INDUSTRIA E COMÉRCIO

Nylon 6	Rio de Janeiro *Demilon* (yarn)

DU PONT DO BRASIL S.A.

Spandex	Paulinia, São Paulo *Lycra* (fused multifil)

EQUIPESCA - EQUIPAMENTOS DE PESCA S.A.

Nylon 6	Campinas, São Paulo (monofil)

FIBRA S.A.

Nylon 6	Americana, São Paulo *Lilion* (yarn)
Polyester	São Paulo (yarn)
Rayon	Americana (reg yarn & staple)

HOECHST DO BRASIL QÚIMICA E FARMACÉUTICA S.A.

Polyester	Osasco *Trevira* (yarn & monofil)

INDÚSTRIAS MATARAZZO DE FIBRAS SINTÉTICAS S.A.

Nylon 6	São José dos Campos, São Paulo (yarn)

MANAP - MANUFATURA NACIONAL DE PLÁSTICOS *

Nylon 6	Osasco, São Paulo *Caicara* (monofil)

MARCATTO S.A. IND. E COM. *

Nylon 6	Jaraguá do Sul, Santa Catarina (monofil)

MAZZAFERRO POLIMEROS E FIBRAS SINTÉTICAS S.A

Nylon 6	São Bernardo do Campo, São Paulo *Grilon, Trilon* (yarn & monofil)
Polyester	São Bernardo do Campo, São Paulo (monofil)

MONOFIL - CIA. INDUSTRIAL DE MONOFILAMENTOS *

Nylon 6	São Paulo, São Paulo (monofil)

NOVELSPUMA - ESPUMA DE NYLON S.A.

Nylon 6	São Paulo, São Paulo (yarn)

POLYENKA S.A.

Polyester	Americana, São Paulo *Diolen* (yarn)

POLYNOR S.A. INDÚSTRIA E COMÉRCIO DE FIBRAS SINTÉTICAS DA PARÁIBA

Polyester	João Pessoa, Paraiba *Amilon, Polynor* (yarn & staple)

RHODIA S.A.

Acetate	Santo André, *Albamecha*, (tow)
Acrylic	São José dos Campos, São Paulo *Crylor* (staple)
Nylon 66	Santo André *Dropnyl, Rhodianyl* (yarn & staple) São Bernardo do Campo, São Paulo *Celtral BCF* (yarn)
Polyester	Santo André *Dropgal-Tergal, Tergal* (yarn & staple) São José dos Campos *Bidim* (spunbonded) São Bernardo do Campo (yarn)

RHODIA NORDESTE S.A.

Polyester	Cabo, Pernambuco *Tergal* (staple)

SEARA IND. TÉXTIL LTDA. *

Nylon 6	Londrina, Paraná (monofil)

SPUMAR S.A. INDÚSTRIA E COMERCIO *

Nylon 6	São Paulo (yarn)

OLEFIN FIBER

ARTEPESCA - S.A. ARTIGOS DE PESCA DO NORDESTE Igarassu, Pernambuco (E & P monofil)

BRASIL VISCOSE S.A. Jundiapeba, São Paulo (P staple)

ETRÚRIA S.A. INDÚSTRIA DE FIBRAS E FIOS SINTETICOS Mairinque, São Paulo (P staple)

FADEMAC - FABRICA DE MATERIAIS DE CONSTR. S.A. Jacarei, São Paulo (P staple)

FITESA - FIÁÇAO TÉXTIL DE EMBALAGENS PLÁSTICAS S.A. Guaiba, Rio Grande do Sul (P staple) & Porto Alegre, Rio Grande do Sul (P film)

INYLBRA S.A. TAPETES E VELUDOS Diadema, São Paulo (P staple)

MANAP - MANUFATURA NACIONAL DE PLÁSTICOS Osasco, São Paulo (P monofil)

MARCATTO S.A. IND. E COM. Jaragua do Sul, Santa Catarina (E & P monofil)

MONOFIL - CIA. INDUSTRIAL DE MONOFILAMENTOS São Paulo, São Paulo (P monofil)

SEARA IND. TÉXTIL LTDA. Londrina, Paraná (E & P monofil)

SPUMAR S.A. INDÚSTRIA E COMÉRCIO São Paulo, *Fibrilene, Polylene, Polyplan, Prolene* (P yarn, staple & film)

TAPETELENE - INDÚSTRIA S.A. Pajucara/Maramguape, Ceará (P staple)

TINTORIA S.A. - BENEFICIAMENTO DE FIO (P yarn)

OLEFIN FILM FIBER, only

BRASMEN TOL CACAPAVA S.A. Cacapava, São Paulo

CACIQUE DE EMBALAGENS S.A. INDÚSTRIA E COMÉRCIO Londrina, Paraná

C.A.T.A. - CIA. AMAZONIA TÉXTIL DE ANIAGEM S.A. Belém, Pará

CIA. FAB. YOLANDA S.A. Récife, Pernambuco

CIA. JAUENSE INDUSTRIAL Jau, São Paulo

CIA. UNIÁO MANUFATORA DE TECIDOS Rio de Janeiro

DICOPLAST S.A. INDÚSTRIA E COMÉRCIO DE PLASTICOS Presidente Prudente, São Paulo

EMPLA - EMBALAGENS PLÁSTICAS S.A. Rio de Janeiro

BRAZIL (continued)

FIBRASA IND. E COM. DE FIOS E EMBALAGENS S.A. Espirito Santo

FIBROTEX TECELAGEM DE FIBRAS S.A. São Paulo

IMPLASA - INDÚSTRIA DE PLÁSTICOS ZANIOLO S.A. São José dos Pinhais, Paraná

INDÚSTRIA TÉXTIL TSUZUKI LTDA. Suzano, São Paulo

IPLAC DO BRASIL S.A. PLÁSTICOS Fortaleza, Ceará*

NOVOPLAST IND. E COM. DE PLÁSTICOS Nova Odessa, São Paulo

PLABASA - PLÁSTICOS DA BAHIA S.A. Salvador, Bahiá

PLASMINAS - PLÁSTICOS MINAS LTDA. Tres Pontas, Minas Gerais

PLÁSTICOS DO PARANÁ LTDA. Londrina, Paraná

PLÁSTICOS LINIL S.A. Récife, Pernambuco

PLÁSTICOS INDÚSTRIA DE EMBALAGENS LTDA. Campinas, São Paulo

QUALITAS IND. E COM. LTDA. São Paulo

SACOPLAST/PLANOSA - PLÁSTICOS DO NORDESTE S.A. Natal, Rio Grande do Norte

GLASS FIBER

OCFIBRAS Rio Claro, São Paulo *Fiberglas*

BULGARIA

KOMBINAT "DIMITAR DIMOV" *

Acrylic	Burgas *Bulana* (staple)
Nylon 6	Vidin *Vidlon* (yarn)
Polyester	Yambol *Yambolen* (yarn, staple & tow)

KOMBINAT "SVILOSA"

Rayon	Svishtov (reg yarn & staple)

OLEFIN FIBER

KOMBINAT "DIMITAR DIMOV" Yambol (P staple)

CANADA

BASF FIBRES INC.

Nylon 6	Amprior, Ontario *Zefran* (yarn & staple)

CELANESE CANADA INC.

Acetate	Drummondville, Quebec (yarn)
Polyester	Millhaven, Ontario *Fortel* (yarn, staple, tow & fiberfill)

CANADA (continued)

COURTAULDS (CANADA) LIMITED

Rayon	Cornwall, Ontario (staple)

DU PONT CANADA INC. *

Nylon 66	Kingston, Ontario *Antron, Cantrece, Du Pont* (yarn, staple & tow)
Spandex	Maitland *Lycra* (fused multifil)

FIRESTONE TEXTILES CO.-A DIVISION OF FIRESTONE CANADA LTD.-LTEE

Nylon 6	Woodstock, Ontario (yarn & monofil)

OLEFIN FIBER

AMOCO FABRICS & FIBERS CO. Brantford & Hawkesbury, Ontario, St. Jean, Quebec *Protel* (P yarn, staple, E & P monofil & P film)

CALKO MILLS LTD. Rivière du Loup, Quebec (P monofil)

CANADA WESTERN CORDAGE CO., LTD. New Westminster, B.C. (P monofil)

DOON TWINES LTD. Kitchener, Ontario (P yarn, monofil & staple)

DU PONT CANADA INC. North Bay, Ontario (P film)

GUELPH TWINES LTD. Guelph, Ontario (P monofil & film)

HERCULES INC. Iberville, Ontario (staple)

NOVASTRAND St. John, New Brunswick (P monofil)

POLI-TWINE CORP. LTD. Belleville, Ontario & Saskatoon, Saskatchewan *Polytie, PolyTwine, Spiralok* (P monofil)

SCHLEGEL COMPANY CANADA Oakville (P monofil)

STRUDEX FIBRES LTD., DIVISION OF KRAUS CARPET MILLS LTD. Waterloo (P yarn & staple - captive)

OLEFIN FILM FIBER, only

FIBERWORLD, LTD. Hawkesbury, Ontario

POLYMER INTERNATIONAL (N.S.) LTD. Truro, N.S.

GLASS FIBER

FIBERGLAS CANADA LIMITED Guelph, Ontario *Fiberglas*

CHILE

GOODYEAR DE CHILE, S.A.I.C.

Nylon 6	Maipú, Santiago (yarn & monofil)

INDUSTRIAS QUIMICAS GENERALES S.A.

Rayon	Quillota, Valparaiso (ind yarn & staple)

CHILE (continued)

LANERA AUSTRAL S.A.

Polyester	Santiago (yarn, staple & tops)

MANUFACTURAS SUMAR S.A.

Nylon 6	El Pinar 172, Santiago *Crilobal* (yarn)
Polyester	El Pinar 172, *Poligal* (yarn & staple)

QUIMICA INDUSTRIAL S.A.

Polyester	Maipú, Santiago *Polycron* (staple & tops)

CHINA, PEOPLE'S REPUBLIC OF

Although reliable information on locations of manufactured fiber plants in the People's Republic of China is not available, every effort has been made to make the following listing as complete as possible.

RAYON and/or ACETATE PLANTS reported at:
Amoy, Antung, Canton, Foshan, Kirin, Nanchang, Nanking, Paoting and Shanghai.

NYLON PLANTS reported at:
Beijing; Changsha*, Hsinhsiang, Paoting Province; Jiangsu*, Jinzhou; Liaoyang; Pingdings; Shanghai; Shanyi; Sian; Sichuan; Sining; Tianjin, Yeuyang, Hunan Province* and Zhenjiang.

POLYESTER PLANTS reported at:
Beijing; Changzhou, Jiangsu Province; Fangshen, Beijing Province; Guangdong Province; Guangzhou, Canton Province; Hangchow; Heilongjiang; Henan*; Jinshan, Shanghai Province; Liaoyang; Nantong; Nanjing, Jiangsu Province; Shanghai; Sichuan; Taiyuan; Tianjin; Tientsin; Xiamen, Funjion Province; Xinhu; Yizheng and Zhenjiang.

ACRYLIC PLANTS reported at:
Anquing, Anhui Province; Chenchiang, Harbin Province; Daquing; Fushun; Lanzhou; Lude; Maoming; Qinhuangdao; Shanghai and Zibo.

SYNTHETIC (NONCELLULOSIC) PLANTS reported at:
Beijing (vinal); Canton (vinyon); Chunking (vinyon); Foochow (vinyon); Lanzhou (olefin & vinal); Shanghai (vinyon); Shengli (vinyon) and Tientsin (vinyon).

The following three plants have been reported as producing glass fiber: Shanghai Glass Fiber Plant, Shanghai Tungfanghung Glass Fiber Plant and Tientsin Glass Fiber Plant.

COLOMBIA

COLTEFIBRAS S.A.

Polyester	Igatui, Antioquia* (yarn & staple)

ENKA DE COLOMBIA S.A.

Nylon 6	Girardota, Antioquia *Enkalon* (yarn)
Polyester	Girardota *Terlenka* (yarn & staple)

FABRICA DE HILAZAS VANYLON S.A.

Nylon 6	Barranquilla, Atlántico *Vanylon* (yarn & monofil)

POLIMEROS COLOMBIANOS S.A.

Polyester	Medellin, Antioquia *Primel* (yarn, staple, tow & tops)

COLOMBIA (continued)

QUIMICA INDUSTRIAL (formerly CELANESE COLOMBIANA, S.A.)

Acetate	Yumbo, near Cali, Valle del Cauca (yarn)
Polyester	Yumbo (yarn & staple)

QUINTEX PLANTA DE SABANETA (formerly CELANESE COLOMBIANA, S.A.)

Nylon 6	Sabaneta, Antioquia *Nylocel* (yarn)

ZYLETTE (LAFAYETTE)

Polyester	Bogotá (yarn)

OLEFIN FILM FIBER, only

COMPANIA NACIONAL DE EMPAQUES S.A. Medellin

PETROQUIMICA Colombiana, Cartagena,*

POLYMER DE COLOMBIA S.A. Cartagena

COSTA RICA

OLYMPIC FIBERS, S.A.

Polyester	San Antonio de Belén (yarn) (idle)

CUBA

INDUSTRIAS CONSOLIDADAS DE MATANZAS, S.A.

Rayon	Matanzas (ind & reg yarn & staple)

CYPRUS

OLEFIN FIBER

LORDOS POLYSAC (LIMASSOL) LIMITED Limassol (P film)

CZECHOSLOVAKIA

CHEMICKÉ ZÁVODY JURAJA DIMITROVA, N.P.*
(GEORGE DIMITROV CHEMICAL WORKS, NATIONAL CORP.)

Rayon	Bratislava, Slovakia (reg yarn)

CHEMLON, N.P. (CHEMLON, NATIONAL CORPORATION)

Nylon 6	Humenné, Slovakia *Chemlon* (yarn)

CHEMOPETROL

Rayon	Neratovice (yarn)

CHEMOSVIT, N.P. (CHEMOSVIT, NATIONAL CORPORATION) *

Nylon 6	Svit, Slovakia *Svitontex* (yarn & staple)
Rayon	Svit (reg yarn)

CZECHOSLOVAKIA (continued)

SEVEROCESKÉ CHÉMICKE ZÁVODY, N.P. (NORTH BOHEMIAN CHEMICAL WORKS, NATIONAL CORP.)

Rayon	Lovosice, Bohemia (ind yarn)

SILON, N.P. (SILON, NATIONAL CORPORATION)

Nylon 6	Planá nad Luznici, Bohemia *Silon* (yarn & monofil)
Polyester	Planá nad Luznici *Tesil, Tevyro, Velana* (staple, tow & fiberfill)

SLOVENSKÝ HODVÁB, N.P. (SLOVAKIAN FILAMENT YARN, NATIONAL CORPORATION)

Polyester	Senica nad Myjavou, Slovakia *Slotera* (yarn)
Rayon	Senica nad Myjavou (reg yarn)

SPOLANA, N.P. (SPOLANA, NATIONAL CORPORATION)

Rayon	Neratovice, Bohemia (staple)

OLEFIN FIBER

CHEMICKÉ ZÁVODY JURAJA DIMITROVA, N.P. Bratislava *Istrona, Labren, Nobelex* (P yarn & staple)

CHEMOSVIT, N.P. Svit *Prolen, Texizol* (P yarn & spunbonded)

JUTA, N.P. Úpice, Bohemia (P spunbonded)

OLEFIN FILM FIBER, only

JUTA, N.P. Adamov, Moravia and Bernartice u Trutnova, Dvur Králové, Jilemnice & Úpice, Bohemia

POVAZSKÉ CHÉMICKE ZÁVODY, N.P. Zilina, Slovakia

TECHNOLEN, N.P. Lomnice nad Popelkou, Bohemia

GLASS FIBER

SKLOPLAST, N.P. (SKLOPLAST, NATIONAL CORPORATION) Trnava, Slovakia (yarn, chopped strand & mat)

VERTEX, N.P. (VERTEX, NATIONAL CORPORATION) Litomysl, Bohemia (yarn, roving, mat & staple yarn)

DENMARK

OLEFIN FIBER

A/S FIBERTEX Aalborg (P staple)

DANAKLON A/S Varde (E & P staple & film), *Kranit* (P reinforcing fiber) *Soft* 71 (P fiber non-woven)

ESBJERG THERMOPLAST, (a division of Vita Polymer Denmark A/S) Esbjerg (E & P monofil)

DENMARK (continued)

OLEFIN FILM FIBER, only

R.F.W. PLAST-INDUSTRI A/S Vejle (P film)

ROBLON A/S Frederikshavn (P film)

ECUADOR

ECUATORIANA DE TEJIDOS DE PUNTA - ECUAPUNTO CIA. LTDA.

Polyester	Punta (yarn)

ENKADOR S.A.

Polyester	Sangolqui, Pichincha (yarn)

FIBRATEX S.A.

Polyester	Guayaquil, Guayas (yarn)

EGYPT

ESTABLISSEMENTS INDUSTRIELS POUR LA SOIE ET LE COTON S.A.A. (E.S.C.O.)

Rayon	Cairo (reg yarn)

MISR AL-AMIRIYA INDUSTRIAL FIBRE CO.

Polyester	Amiriya (yarn* & staple)

SOCIETE MISR POUR LA RAYONNE S.A.A. (MISR RAYON CO.)

Nylon 6	Kafr-el-Dawar *Mismylon* (yarn), *Mismylon* (staple)
Polyester	Kafr-el-Dawar *Polymisr* (yarn)
Rayon	Kafr-el-Dawar (reg yarn & staple)

EL SALVADOR

OLEFIN FIBER

FILAMENTOS Y PERFILES, S.A. (FILPERSA) San Salvador *Duraplen* (E & P monofil)

SALVAPLASTIC, S.A. San Salvador (P monofil)

FINLAND

FINEFIBRE OY

Nylon 66	Tornio (yarn)

KEMIRA OY SATERI

Rayon	Valkeakoski (staple)

OLEFIN FILM FIBER, only

MANILLA OY Rymättylä

PIIPPO OY Lempäälä

FINLAND (continued)

GLASS FIBER

A. AHLSTRÖM OY GLASSFIBRE Karhula *Kuitulasi* (roving & mat)

FRANCE

CELLATEX (a subsidiary of Rhône-Poulenc-Textile)

Rayon	Givet, Ardennes; Isère (reg yarn)

COURTAULDS S.A.

Acrylic	Pont du Leu, Coquelles, Pas-de-Calais *Courtelle* (staple)

NYSAM S.A.

Nylon 6	St. Quentin, Aisne *Lilion* (yarn)

RHÔNE-POULENC-FIBRES (a subsidiary of Rhône-Poulenc-Textile)

Nylon 66	Albi, Tarn; St. Laurent-Blangy, Pas-de-Calais, St. Quentin, Aisne & Valance, Drôme *Nylfrance* (yarn & staple)
Polyester	Gauchy, Aisne & Valence *Bidim* (spunbonded), *Tergal* (yarn & staple)

RHOVYL (a subsidiary of Rhône-Poulenc-Textile)

Vinyon	Tronville-en-Barrois, Meuse *Clévyl, Rhovyl, Thermovyl* (yarn & staple)

SOCIETE CHOMARAT

Nylon 6	Mariac (yarn - captive)

OLEFIN FIBER

PLASTIQUE DE ROUBAIX Roubaix (P film & staple)

SODOCA FABRICATION DE NONTISSES SYNTHETIQUES S.A.R.L. Neuf Brisach, Haut-Rhin (P spunbonded)

OLEFIN FILM FIBER, only

ETS. AMMANN & CIE. Saint-Louis

ETS. BATAILLE Rosendael

BIHR FRERES S.A. Xertigny

BOUSSAC SAINT FRERES S.A. Flixecourt

SEINE & LYS Paris

GLASS FIBER

OWENS-CORNING FIBERGLAS FRANCE S.A. L'Ardoise, Gard *Fiberglas*

VETROTEX SAINT-GOBAIN Chambéry, Savoie-Fils et Fibres de Renforcement *Vetrotex*

GERMAN DEMOCRATIC REPUBLIC
DEUTSCHE DEMOKRATISCHE REPUBLIK (EASTERN)

(Those facilities indicated by # are part of the trust VEB Chemiefaserkombinat Schwarza "Wilhelm Pieck".)

CHEMIEFASERWERK "FRIEDRICH ENGELS" #

Acrylic	Premnitz, Krs. Rathenow *Wolpryla* (staple)
Nylon 6	Premnitz *Dederon* (staple)
Polyester	Premnitz *Grisuten* (staple)
Rayon	Premnitz (reg yarn)

CHEMIEFASERWERK "WILHELM-PIECK-STADT" GUBEN #

Nylon 6	Guben *Dederon* (yarn & monofil)
Polyester	Guben *Grisuten* (yarn)

KUNSTSEIDENWERK "CLARA ZETKIN, ELSTERBERG" #

Rayon	Elsterberg, Krs. Greiz (reg yarn)

SACHSISCHES KUNSTSEIDENWERK "SIEGFRIED RADEL" #

Polyester	Pirna* (yarn)
Rayon	Pirna (ind, reg & cupra yarn)

SACHSISCHE ZELLWOLLE #

Rayon	Plauen (staple)

SPINNSTOFFWERK "OTTO BUCHWITZ" #

Rayon	Glauchau (staple)

VEB CHEMIEFASERKOMBINAT SCHWARZA "WILHELM PIECK"

Nylon 6	Schwarza, Krs. Rudolstadt *Dederon* (yarn)
Rayon	Schwarza (staple)

VEB FILMFABRIK FOTOCHEMISCHES KOMBINAT

Acrylic	Wolfen, Krs. Bitterfeld *Wolpryla* (staple)
Rayon	Wolfen (ind yarn & staple)
Vinyon	Wolfen *Piviacid* (staple)

ZELLSTOFF-UND ZELLWOLLWERKE WITTENBERGE #

Rayon	Wittenberge (staple)

GLASS FIBER

VEB GLASSEIDENWERK *Oschatz Glasseidengewebe, Glasseiden-Roving, Glasseiden-Stapelbindermatten, Glasseiden-Twist, Glasseiden-Zwirn, Roving-Gewebe*

GERMANY, FEDERAL REPUBLIC OF
BUNDESREPUBLIK DEUTSCHLAND (WESTERN)

AKZO FIBERS AND POLYMERS DIVISION, ENKA A.G.

Nylon 6/66	Obernburg *Enkalon, Enka Nylon* (yarn)
Polyester	Oberbruch & Obernburg *Diolen* (yarn)
Rayon	Kelsterbach, Oberbruch & Obernburg *Cordenka, Enka Viscose* (ind & reg yarn)

BAYER A.G.

Acrylic	Dormagen *Bayer-Textilfaser Dralon* (yarn & staple)
Nylon 6	Dormagen *Perlon-Draht* (monofil)
Spandex	Dormagen *Bayer-Textilfaser Dorlastan* (fused multifil)

GERMANY, FEDERAL REPUBLIC OF
(continued)
BUNDESREPUBLIK DEUTSCHLAND (WESTERN)

BOLTA WERKE G.m.b.H.

Saran	Nürnberg *Bolta* (monofil)

DEUTSCHE ICI G.m.b.H.

Nylon 66	Östringen *Timbrelle, Tactel* (yarn & staple)

DU PONT DE NEMOURS (DEUTSCHLAND) G.m.b.H.

Nylon 66	Uentrop-Hamm (yarn & staple)
Polyester	Uentrop-Hamm (staple & fiberfill)

E. HAHL KG •

Nylon 6	Munderkingen (staple)

FASERWERKE LINGEN G.m.b.H.

Acrylic	Lingen *Bayer-Texilfasern Dralon* (staple)

HOECHST A.G.

Acrylic	Kelheim/Donau *Dolan* (staple)
Polyester	Bad Hersfeld, Hessen & Bobingen/Augsburg-land *Trevira* (yarn, staple & spunbonded) *Trevira-Draht* (monofil)
Rayon	Kelheim/Donau (staple)

KUNERT

Nylon 66	Deggendorf (yarn)
Polyester	Deggendorf (yarn)

LUTRAVIL SPINNVLIES •

Nylon 6	Kaiserslautern *Lutrabond* (spunbonded)
Polyester	Kaiserslautern *Lutradur* (spunbonded)

NORDDEUTSCHE FASERWERKE G.m.b.H.

Nylon 6/66	Neumünster *SIKS NYLON* (yarn), *SIKS PERLON* (yarn & staple)
Polyester	Neumünster *Avitron* (yarn)

PHOENIX GUMMIWERK A.G.

Saran	Hamburg/Harburg *Harlan* (monofil)

HEINRICH REINHOLD KG •

Nylon 6	Selbitz, Bayern (staple)

RHÔNE-POULENC - RHODIA A.G.

Acetate	Freiburg/Br. *RHODIA FILTER TOW* (tow)
Nylon 6.6	Freiburg/Br. & Rottweil a. N/Württ. *RHODIA MERYL, RHODIA NYLON 6.6, RHODIA SPORT* (yarn & staple)
Polyester	Freiburg/Br. *RHODIA COMFORTO, RHODIA PONTELLA, SETILA, TERGAL* (yarn)

SPINNSTOFFABRIK ZEHLENDORF A.G.

Polyester	Berlin-Zehlendorf *Trevira* (yarn & staple)

WACKER-CHEMIE G.m.b.H.

Vinal	München-Burghausen *Wacker MP-Faser* (staple)

GERMANY, FEDERAL REPUBLIC OF
(continued)
BUNDESREPUBLIK DEUTSCHLAND (WESTERN)

OLEFIN FIBER

J. F. ADOLFF A.G. Backnang (P film)

AMOCO FABRICS & FIBERS CO., DIVISION OF AMOCO (DEUTSCHLAND) G.m.b.H. Gronau (P film & staple)

J. H. BENECKE G.m.b.H. Peine *Corovin* (P spunbonded)

R. J. J. RUDOLF BILLERMANN KG Emsdetten (P yarn & staple)

CHEMISCHE WERKE HÜLS A.G. Marl, Kreis Recklinghausen, Westphalia *Vestolan* (E & P monofil)

DYNAMIT NOBEL A.G. Troisdorf, Bez. Köln *Trofil* (E & P monofil & tow)

DEUFIL Bergkamen (P yarn)

FASERWERKE BOTTROP G.m.b.H. Bottrop (P staple)

FÜSSENER TEXTIL A.G. Füssen (P film)

GEO. GLEISTEIN & SOHN Bremen-Vegesack (P film & monofil)

E. HAHL KG Munderkingen (P monofil)

RUDOLF HILLER KG (P monofil)

LUTRAVIL SPINNVLIES Kaiserslautern *Lutrasil* (P spunbonded)

HEINRICH REINHOLD KG Selbitz/Bayern (P staple)

STEEN Hamburg (P staple)

WESTFALIA SPINNEREI U. KUNSTOFFWERK SCHEM KG Minden (P monofil & film)

OLEFIN FILM FIBER, only

BAUMHÜTER G.m.b.H. Wiedenbrück

BREMER WOLL-KAMMEREI Bremen-Blumenthal

ERNST JAEGER Düsseldorf-Reisholz

HEINZ G. JUNEMANN (NORDHESSISCHE HAARWARENFABRIK) Felsberg

KUSGA KUNSTOFFGARNE G.m.b.H. Mainz

POLYDRESS PLASTIC G.m.b.H. Michelstadt

POLYUNION KUNSTOFFWERK Mesum

SCHILGEN Emsdetten

SPOHN G.m.b.H Freiburg

GERMANY, FEDERAL REPUBLIC OF (continued)
BUNDESREPUBLIK DEUTSCHLAND (WESTERN)

B. T. F. TECKLENBORG & CO. Bremen-Grohn

DR. KARL WETEKAM & CO. Melsungen

GLASS FIBER

GEVETEX-TEXTILGLAS G.m.b.H. Aachen & Herzogenrath
Fiberglas Vetrotex

SCHULLER GLASWERK Westheim

GREECE

ETMA S.A.

Nylon 6/66	Athens (yarn)
Rayon	Athens (reg yarn)

HELLENIC SYNTHETICS INDUSTRY

Polyester	Kalogreza (yarn)

POLYETMA LTD.

Polyester	Athens (yarn)

VOMVICRYL S.A. (affiliate of "VOMVIX" S.A.)

Acrylic	Stylis, near Lamia (yarn, staple, tow & tops)

"VOMVIX" S.A.

Nylon 6/66	Athens (yarn)
Polyester	Athens (yarn)

OLEFIN FIBER

VIOFARM Argos (P staple)

OLEFIN FILM FIBER, only

ARIPLAST S.A. Athens

BIOSISAL Athens

DESSILA Piraeus

ELVISAK Athens

MARINE ROPE Athens

OLYMPIC ROPES Piraeus

SISAL ROPERY Salonika

C. VELLIS HEIRS S.A. Piraeus

VESY S.A. SYNTHETIC MATERIALS INDUSTRY Piraeus

GUATEMALA

HILOS SINTETICOS CENTROAMERICANOS, S.A.

Nylon 6	San José Pinula, Guatemala (yarn) (idle)

OLEFIN FIBER

CORDELERIA LA RAPIDA Guatemala, Guatemala (P monofil)

HONDURAS

OLEFIN FIBER

POLYMER (subsidiary of United Brands) San Pedro Sula (P film)

HUNGARY

DANUFIL

Rayon	Nyergesújfalu* (staple)

MAGYAR VISCOSAGYÁR (Hungarian Viscose Factory) *

Acrylic	Nyergesújfalu *Crumeron* (staple)
Nylon 6	Nyergesújfalu *Danamid* (yarn & staple)
Rayon	Nyergesújfalu *Crumeron* (staple)

OLEFIN FIBER

GRABOPLAST Győr (P staple)

KENDER JUTA TEXTILIPARI V. Budapest (P film)

KENDERFONÓ ÉS SZÖVÖIPARI V. SZEGED Szeged (P film)

MAGYAR VISCOSAGYÁR Nyergesújfalu *Popril* (P staple)

SOPRONI SZÖNYEGGYÁR Sopron *Sopilen* (P yarn)

TISZA CHEMICAL COMBINE Lenin Varas (P staple)

INDIA

ACME INVESTMENTS LTD.

Nylon 6	Panki Industrial Area, Kanpur* (yarn)

THE AHMEDABAD MFG. & CALICO PRINTING CO. LTD.
CALICO POLYESTER FIBRE DIV.

Polyester	Vadodara, Gujarat *Ilacron* (staple)

ANDHRA PRADESH RAYONS LTD.

Rayon	Kamalapuram, Warangal District, Andhra Pradesh* (staple)

THE BARODA RAYON CORPORATION LIMITED

Nylon 6	Udhna, Gujarat *Snialon* (yarn)
Polyester	Udhna *Sniater* (yarn)
Rayon	Udhna (reg yarn)

BONGAIGAON REFINERY AND PETROCHEMICALS LTD.

Polyester	Goalpara, Assam* (staple)

CENTURY ENKA LIMITED

Nylon 6	Bhosari, Pune, Maharashtra* *Enkalon* (yarn)
Polyester	Bhosari (yarn)

CENTURY RAYON (Prop.: The Century Spg. & Mfg. Co. Ltd.)

Rayon	Kalyan, near Bombay, Maharashtra (ind & reg yarn)

ESTER INDIA LTD.

Polyester	Khatima, Nainital, Uttar Pradesh (yarn)

GARWARE NYLONS LIMITED

Nylon 6	Pimpri, Pune, Maharashtra* *Garware* (yarn & monofil)
Polyester	Pimpri (yarn)

THE GRASIM INDUSTRIES LTD.

Rayon	Birlagram, Nagda, Madhya Pradesh & Birlakootoam, Mavoor, Kerala (staple)
Polyester	Rajgarh*, Madhya Pradesh (staple)

GUJARAT NYLONS LTD.

Nylon 6	Bharuch, Gujarat (yarn)

HARYANA PETROCHEMICALS LTD.

Polyester	Rewari, Haryana* (yarn)

ICI INDIA LTD.

Polyester	Thane, Maharashtra (staple)

INDIA POLYFIBRES, LTD.

Polyester	Barabanki & Lucknow, Uttar Pradesh (staple)

INDIAN EXPLOSIVES LTD.

Polyester	Thane, near Bombay, Maharashtra *Terene* (staple)

INDIAN ORGANIC CHEMICALS LIMITED

Polyester	Manali, Madras, Tamil Nadu *Futura* (yarn & staple)

INDIAN PETROCHEMICALS CORP. LTD.

Acrylic	Vadodara, Baroda, Gujarat *Cashmilon* (staple)

THE INDIAN RAYON & INDUSTRIES LIMITED

Rayon	Veraval, Gujarat (reg yarn)
Polyester	Broach* (yarn)

J.K. RAYON, J.K. PURI

Rayon	Kanpur, Uttar Pradesh (reg yarn)

J.K. SYNTHETICS LIMITED

Acrylic	Kota, Rajasthan *Jayacrylic* (staple)
Nylon 6	Kota *Jayanka, Jaycord, Jaykalon* (yarn, monofil & staple)
Polyester	Calcutta, Kota, Orissa* *Jakaylene* (yarn & staple)

JAGATJIT COTTON TEXTILE MILLS LTD.

Nylon 6	Hoshiarpur, Punjab (yarn)
Polyester	Hoshiarpur (staple)

KARNATAKA STATE INDUSTRIAL DEVELOPMENT CORPORATION LIMITED

Nylon 6	Karnataka* (yarn)
Polyester	Karnataka* (yarn & staple)

KESORAM RAYON (Prop.: Kesoram Industries and Cotton Mills Ltd.)

Rayon	Triveni, Hooghly, West Bengal (reg yarn)

L ML FIBRES LTD.

Nylon 6	Kanpur (yarn)

MODIPON LIMITED

Nylon 6	Modinagar, Uttar Pradesh *Modipon* (yarn)
Polyester	Modinagar (yarn)
Rayon	(staple*)

THE NATIONAL RAYON CORPORATION LIMITED

Nylon 6	Mohane, Kalyan, Maharashtra* *N.R.C* (yarn)
Rayon	Mohane, Kalyan (ind & reg yarn)

NIRLON SYNTHETIC FIBRES & CHEMICALS LIMITED

Nylon 6	Goregaon, Bombay, Maharashtra *Nircord, Nirlon* (yarn & monofil)
Polyester	Bombay *Nirester* (yarn)

ORISSA SYNTHETICS LTD.

Polyester	Baulpur Village, Demkanal, Orissa* (staple)

ORKAY SILK MILLS PVT. LTD.

Polyester	Patalganga, Maharashtra* (yarn)

PARASRAMPURIA SYNTHETICS LTD.

Polyester	Alwar, Rajasthan* (yarn)

PASUPATI ACRYLON LIMITED

Acrylic	Moradabad, Uttar Pradesh* (staple)

PETROFILS CO-OPERATIVE LIMITED

Nylon	Valia, Bharuch, Gujarat (yarn)
Polyester	Vadodara, Gujarat (yarn)

PRADESHIYA INDUSTRIAL INVESTMENT CORPORATION OF UTTAR PRADESH

Polyester	Uttar Pradesh* (yarn)

PUNJAB STATE INDUSTRIAL DEVELOPMENT CORP. LTD.

Acrylic	Punjab (staple)
Polyester	Punjab (staple)

RAYMOND SYNTHETICS

Polyester	(yarn*)

RELIANCE INDUSTRIES LTD.

Polyester	Patalganga, Maharashtra (yarn & staple*)

INDIA (continued)

SHREE SYNTHETICS LIMITED
Nylon 6 Ujjain, Madhya Pradesh *Shreelon* (yarn)
Polyester Ujjain *Shreester* (yarn)

SHRI RAM FIBRES LIMITED
Nylon 6 Manali, Madras, Tamil Nadu *Tufcord* (yarn)

SHRIRAM RAYONS
Rayon Kota, Rajasthan (ind yarn)

THE SIRSILK LIMITED
Acetate Sirpur-Kaghaznagar, Andhra Pradesh (yarn & staple)

SOUTH INDIA VISCOSE LIMITED
Rayon Sirumughai, near Mettupalayam, Tamil Nadu (reg yarn & staple)

STERLING STEEL WIRES, LTD.
Nylon 6 Chohal, Hoshiarpur, Punjab (yarn)
Polyester Chohal (yarn)

STRETCH FIBRES (INDIA) LIMITED
Nylon 6 Nagpur, Maharashtra *SF* (yarn)

SWADESHI POLYTEX LIMITED
Polyester Kavinagar, Gaziabad, Uttar Pradesh *Jailene* (staple)

THAPAR DU PONT LTD.
Nylon Goa* (ind yarn)

THE TRAVANCORE RAYONS LIMITED
Rayon Rayonpuram, Kerala (reg yarn)

TUNGABHADRA FIBRES LTD.
Rayon Hosahalli Village, Karnataka (staple)

OLEFIN FIBER

AMITABH TEXTILE MILLS LTD. Dehra Dun, Uttar Pradesh* (P yarn)

ANIL KUMAR JAIN Ankleshwar, Gujarat* (P yarn)

GUJARAT FILAMENTS CORPORATION LTD. Baroda, Gujarat* (P yarn)

GUPTA NEEDLE INDUSTRIES PVT. LTD. Dharuhera, Haryana* (P yarn)

INDO SYNTHETICS CORP. (P yarn*)

J.K. BHAGAT Bhiwand, Alwar, Rajasthan* (P yarn)

KALYANI ASBESTOS CEMENT PVT. LTD. Kalol, Gujarat* (P yarn)

NEOMER LIMITED Baroda, Panchmahal, Gujarat *Proplon* (P staple)

NIAGARA INTERNATIONAL (P yarn*)

INDIA (continued)

POLYPROP INDUSTRIES Dharuhera, Haryana* (P yarn)

POLYPROPYLENE INDIA, LTD. Uttar Pradesh* (P yarn)

RAJASTHAN PETROSYNTHETICS LTD. Udaipur, Rajasthan* (P yarn)

RAJENDRA V. PATEL Cambay, Gujarat* (P yarn)

SANJEEV SHRIYA Uttar Pradesh* (P yarn)

INDONESIA

INDONESIA PENELITIAN SELULOSA (Cellulose Research Institute)

P.F. FIBRES e CHEMICALS
Nylon (yarn)

P.T. BERKAT INDAH AGUNG
Rayon Tangerang, West Java* (staple)

P.T. FILAMENDO SAKTI
Nylon 6 Tangerang* (yarn)

P.T. INDO-BHARAT RAYON
Rayon Desa Cilangkap, Purwakarta (staple)

P.T. INDO RAMA SYNTHETICS
Rayon Jatilurhur-Purwakarta (staple)
Acrylic Jatilurhur-Purwakarta (staple)
Polyester Jatilurhur-Purwakarta* (staple)

P.T. INDONESIA ASAHI CHEMICAL
Nylon 6 Jatiluhur, Purwakarta, West Java (yarn)

P.T. INDONESIA TORAY SYNTHETICS
Nylon 6 Tangerang, West Java (yarn)
Polyester Tangerang (staple)

P.T. INDUSTRI SANDANG I
Polyester Tangerang* (staple)

P.T. INDUSTRI SANDANG II
Rayon South Sumatra* & West Kalimantan* (staple)

P.T. INTI
Rayon West Kalimanton* (staple)

P.T. INTI INDAH RAYON UTAMA
Rayon Sosorladang, N. Sumatra* (yarn)

P.T. KUMA FIBER (P.T. Kuraray Manunggal Fibre Industries)
Polyester Cikokol, Tangerang, West Java (staple)

P.T. PAN ASIA SYNTHETIC ABADI
Polyester Bandung (yarn & staple*)

P.T. POLYSINDO EKA PERKASA
Polyester Kaliwungu, Kendal, C. Java (yarn & staple)

INDONESIA (continued)

P.T. SHINTA-INDAH DJAYA

Nylon 6	Tangerang, West Java (yarn)
Polyester	Tangerang *Shinta* (yarn)

P.T. SOUTH PACIFIC VISCOSE

Rayon	Purwakarta, West Java (staple)

P.T. SUSILIA INDAH SYNTHETIC FIBRES INDUSTRIES

Polyester	Djakarta*, Tangerang, West Java (yarn & staple)

P.T. TEXMACO TAMAN SYNTHETIC

Polyester	Kaliwungu Kendal, West Java (yarn)

P.T. TIFICOR (P.T. Teijin Indonesia Fibre Corp.)

Polyester	Tangerang, West Java (yarn & staple*)

P.T. TOLARAM

Polyester	(yarn)

P.T. TRI REMPOA SOLO SYNTHETIC

Polyester	Rempon, Tangerang, West Java (staple)

P.T. VASTEX PRIMA INDUSTRIES

Polyester	Jalan Gedebage Ujungberung Bandung (yarn)

P.T. YASINTA

Polyester	Tangerang, West Java (yarn & staple*)

RAUMAQ ENTERPRISES

Nylon	(yarn)

IRAN

PARSYLON CORPORATION

Nylon 6	Khoram-Abad (yarn)

POLYACRYL IRAN CORPORATION

Acrylic	Isfahan (staple)
Polyester	Isfahan (yarn & staple)

SHERKAT SAHAMI ALIAF

Nylon 6	Tehran *Aliaf* (yarn)

OLEFIN FIBER

JAHANCITT SPINNING & WEAVING CO. Tehran (P film)

IRAQ

HINDIYA RAYON FACTORY

Rayon	Hindiya (reg yarn & staple)

OLEFIN FIBER

STATE ENTERPRISE FOR PLASTIC BAGS Tikrit

IRELAND

ASAHI SYNTHETIC FIBRES (IRELAND) LTD.

Acrylic	Ballina, Mayon *Cashmilon* (staple)

LIRELLE (IRELAND) LTD. (a division of Unifi, Inc.)

Polyester	Letterkenny *Lirelle* (yarn)

WELLMAN INTERNATIONAL LTD.

Nylon 6/66	Mullagh, Kells, Meath *Wellon* (staple)
Polyester	Mullagh *Filwell, Wellene* (staple)

OLEFIN FIBER

F. DRAKE (IRELAND) LTD. Moate, Westmeath (P staple)

J. & L.F. GOODBODY (SYNTHETICS) LTD. Clara, Offaly (P yarn & film)

OLEFIN FILM FIBER, only

IRISH POLYSACKS LTD. Blarney, Cork

IRISH ROPES LTD. Newbridge, Kildare

POLYTEX LTD.

ISRAEL

NILIT

Nylon 66	Migdal Ha-Emek (yarn)

ITALY

ALCANTARA S.p.A.

Polyester	Narni, Umbria (microfibrous material)

AQUAFIL S.p.A.

Nylon 6	Arco di Trento, Trentino *Aqualon* (yarn)
Polyester	Arco di Trento (yarn)

BEMBERG S.p.A.

Nylon 6	Gozzano, Piemonte *Ortalion* (yarn)
Cupro	Gozzano *Bemberg* (yarn)

CARPOL S.p.A.

Nylon 6	Forli, Emilia Romagna (yarn)

ENICHEM FIBRE S.p.A. (formerly Anicfibre)

Acrylic	Ottana & Porto Torres, Sardegna *Euroacril, Sironil* (staple & tow)
Nylon 6	Pisticci, Lucania *Nivion* (yarn & staple)
Polyester	Ottana *Fidion* (staple & tow)

FILANDA 1992 S.p.A.

Polyester	Treviglio, Lombardia (yarn)

FILATURA DI VAL LESINA S.p.A.

Polyester	Andalo Valtellino, Lombardia *Valena* (yarn)

ITALY (continued)

FIMALON S.p.A.

Nylon 66	Castelnuovo Valsugana, Trentino Alto Adige (yarn)

FORTEX SIDAC S.p.A.

Nylon 6	Forli, Emilia Romagna *Forlion* (yarn)

FRATELLI FRANCHI S.p.A.

Nylon 6	Canapale, Toscana *Frankilon* (yarn)
Polyester	Canapale *Frankilene* (yarn)

INDUSTRIE TESSILI VERCELLI S.p.A.

Acetate	Vercelli, Piemonte (yarn)

MIROGLIO TESSILE S.p.A.

Polyester	Alba, Piemonte (yarn)

MONTEFIBRE S.p.A.

Acrylic	Porto Marghera, Veneto *Leacril* (staple & tow)
Polyester	Acerra, Campania *Terital* (yarn, staple & tow)

NOVACETA S.p.A.

Acetate	Magenta, Lombardia (yarn)

NUOVA RAYON ITALIA S.p.A.

Rayon	Rieti, Lazio (reg yarn)

RADICI FIL S.p.A.

Nylon 6	Casnigo, Lombardia (yarn)

SETTE STELLE S.p.A.

Nylon 6	Castelgoffredo, Lombardia (yarn)

SNIA FIBRE S.p.A.

Acrylic	Cesano Maderno, Lombardia; Villacidro, Sardegna *Velicren, Velicren F.R.* (staple & tow)
Nylon 6/66	Castellaccio, Lazio; Cesano Maderno & Varedo, Lombardia; Villacidro; Napoli, Campania *Coro Lilion Souple, Lilion Styl* (yarn, staple & tow)
Polyester	Napoli *Wistel, Wistel F.R.* (yarn)
Poliossiamide	Cesano Maderno *Vivrelle* (staple)

SOCIETA INDUSTRIALE CREMONESE S.p.A.

Rayon	Pizzighettone, Lombardia (ind yarn)

STERE

Polyester	Cardano al Campo, Lombardia (yarn)

TERBOND S.p.A.

Polyester	Pisticci, Lucania *Terbond* (spunbonded)

TEXTILE PRODUKTE S.p.A.

Nylon 6	Villa D'Ogna, Lombardia (yarn & staple)

TORCITURA DI BORGOMANERO S.p.A.

Nylon 6	Milano, Lombardia *Borgolon* (yarn)

OLEFIN FIBER

EUROFIL Gandino, Lombardia (P staple)

FILATURA DI DELEBIO S.p.A. Delebio, Lombardia *Delebion* (P yarn)

ITALY (continued)

FILLI FRANA Casnigo, Lombardia (P staple & film)

I.T.S. Legnano, Lombardia (P yarn)

MOPLEFAN (formerly Himont Italia S.p.A.) Terni, Umbria *Meraklon* (P yarn & staple)

M.R. 81 Grassobbio, Lombardia (P yarn)

NOVASAR Caronno Pertusella, Lombardia (P yarn & staple)

POLYMECON Zibido S. Giacomo, Lombardia (P staple & tow)

SERGEL Casnigo, Lombardia (P staple)

TEXTILE PRODUKTE Villa D'Ogna, Lombardia (P staple)

OLEFIN FILM FIBER, only

CARPET BACKING S.p.A. Ceniga

DE MAGISTRIS EMILIO Bagnolo Cremasco

LICANA NORD S.p.A. Cassano d'Adda (Milano)

MILANPLAST s.r.l. Milano

MOPLEFAN S.p.A. Milano

NEOFIBRE s.r.l. Lendinara

SACHIM (MUMMOLO) Bari

S.E.A.L. S.p.A. Milano

S.I.S.A.L. S.p.A. Piacenza

STIROSIR S.p.A. Milano

TESSITURA LOMBARDA DI CONSONNI ELIA ALBIATE

GLASS FIBER

VETROTEX ITALIA S.p.A. Besana Brianza, Lombardia (mat), Fibras Di Rinforzo *VETROTEX*

VITROFIL S.p.A. Vado Ligure, Liguria

JAPAN

ASAHI CHEMICAL INDUSTRY CO., LTD.

Acrylic	Fuji *Cashmilon, Pewlon* (yarn & staple)
Nylon 6/66	Nobeoka & Moriyama *Asahi Kasei Nylon, Leona* (yarn, monofil & spunbonded)
Polyester	Nobeoka & Moriyama *Asahi Kasei Ester* (yarn & spunbonded)
Rayon	Nobeoka (reg & cupra yarn, cupra staple & cupra spunbonded)
Saran	Suzuka (yarn, monofil & staple)
Spandex	Moriyama *Roica*

DAIWABO RAYON CO., LTD.

Rayon	Masuda (staple)

FUJI SPINNING CO., LTD.

Rayon	Toyo (staple)
Spandex	Kozakai *Fujibo Spandex*

JAPAN EXLAN CO., LTD.

Acrylic	Saidaiji *Exlan* (staple)

KANEBO, LTD.

Acrylic	Hofu *Kanebo Acryl* (staple)
Nylon 6	Hofu *Kanebo Nylon* (yarn)
Polyester	Sabae *Kanebo Polyester* (yarn)
Spandex	Hofu *Kanebo Loobell*

KANEGAFUCHI CHEMICAL INDUSTRY CO., LTD.

Modacrylic	Takasago *Kanecaron, Kanekalon* (staple & tow)

KOHJIN CO., LTD.

Polychlal	Yatsushiro *Cordelan* (staple)
Rayon	Yatsushiro (staple)

KURARAY CO., LTD.

Polyester	Saijo & Tamashima *Kuraray Polyester* (yarn & staple)
Rayon	Saijo & Tamashima *Three Golden Horses* (reg yarn)
Vinal	Okayama *Kuralon* (yarn & staple)

KUREHA CHEMICAL INDUSTRY CO., LTD.

Saran	Mibu *Krehalon* (yarn, monofil & staple)
Vinyon	Mibu *Viclon* (monofil)

MITSUBISHI RAYON CO., LTD. •

Acetate	Toyama (yarn & tow)
Acrylic	Otake *Finel, Silpalon, Vonnel* (yarn & staple)
Polyester	Toyohashi *Soluna* (yarn), Lunaace (staple)
Triacetate	Toyama (yarn)

NIPPON ESTER CO., LTD. (subsidiary of Unitika, Kanebo and Mitsubishi Chemical Industry)

Polyester	Okazaki & Sabae *Unitika Ester, Kanebo Ester* (yarn & staple)

NISSHINBO INDUSTRIES, INC.

Rayon	Tokushima (staple)
Spandex	Tokushima *Mobilon*

NITIVY CO., LTD.

Vinal	Fujieda *Niti-Vilon, Solvron, Vilon* (yarn)

OMIKENSHI CO., LTD.

Rayon	Kakogawa (yarn & staple)

TEIJIN LTD.

Aramid	Iwakuni & Matsuyama *Teijinconex, Technora* (yarn & staple)
Nylon 6	Mihara *Teijin Nylon* (yarn)
Polyester	Iwakuni, Matsuyama & Tokuyama *Teijin-Tetoron* (yarn & staple)
Vinyon	Iwakuni *Teviron* (yarn)

TEIJIN ACETATE LTD. (subsidiary of Teijin Ltd.)

Acetate	Matsuyama *Teijin-Acetate* (yarn)

TOHO RAYON CO., LTD.

Acrylic	Mishima *Beslon* (staple & tow)
Rayon	Tokushima *Tovis* (staple)

TORAY-DU PONT COMPANY LTD.

Spandex	Shiga *Opelon* (fused multifil)

TORAY INDUSTRIES, INC.

Acrylic	Ehime *Toraylon* (staple)
Nylon 6	Aichi, Ishikawa*, Nagoya, Okazaki & Shiga *Amilan, Toray Nylon* (yarn & staple)
Nylon 6/66 copolymer	Aichi *Tapilon* (yarn)
Nylon 66	Aichi, Ishikawa & Okazaki *Promilan* (yarn)
Polyester	Ehime, Ishikawa, Mishima & Okazaki *Toray Tetoron* (yarn & staple)

TORAY-MONOFILAMENT CO., LTD.

Nylon 6	Okazaki *Toray Nylon* (monofil)

TOYO CHEMICAL CO., LTD.

Vinyon	Ofuna *Envilon* (yarn & monofil)

TOYOBO CO., LTD. •

Nylon 6	Tsuruga *Toyobo Nylon* (ind & reg yarn)
Polyester	Iwakuni & Tsuruga *Toyobo Ester* (ind & reg yarn, staple & spunbonded)
Promix	Tsuruga *Chinon* (yarn)
Rayon	Iwakuni *Tufcel* (staple)
Spandex	Tsuruga *Espa*

UNITIKA LTD.

Nylon 6	Uji *Unitika Nylon* (yarn, monofil & staple)
Polyester	Okazaki *Unitika Ester* (ind yarn) *Marix* (spunbonded)

UNITIKA KASEI CO., LTD.

Vinal	Sakoshi (Akoh City) *Mewlon* (yarn, monofil & staple)

UNITIKA RAYON CO., LTD.

Rayon	Uji *Blackbird* (reg yarn)

YOSHIDA KOGYO K.K.

Polyester	Kurobe (yarn)

OLEFIN FIBER

ASAHI CHEMICAL INDUSTRY CO., LTD. Moriyama (P spunbonded)

CHISSO POLYPRO FIBER CO., LTD. Moriyama Chisso Polypro, ES Fiber (P yarn & staple)

DAIWABO CO., LTD. Harima *Daiwabo Polypro, NBF Fiber* (E & P staple)

HAGIHARA INDUSTRY CO., LTD. Kurashiki (E monofil & film)

HIRATA SPINNING CO., LTD. Yokkaichi *Hiralon* (E & P yarn & monofil)

JAPAN (continued)

INABA SEIKO, LTD. Gamagori (E monofil)

KANEYA SEIKO, LTD. Hokkaido & Kushiro (E & P monofil)

MARUAI CO., LTD. Toyohashi (E monofil)

MITSUBISHI RAYON CO., LTD. Toyohashi *Mitsubishi Pylen* (P yarn & staple)

NAGANO KAKO CO., LTD. Nagano (E monofil)

SHOWA POLYMER CO., LTD. Ibaraki (E monofil & film)

SUNREX INDUSTRY CO., LTD. Yokkaichi (E monofil & P spunbonded)

TAI-RAY CO., LTD. Mito *Danzex, Danzex Lite, Liplon* (E monofil, P yarn & monofil)

TANIYAMA CHEMICAL INDUSTRY CO., LTD. Okayama *Tanikalon* (E monofil)

TOA WOOL SPINNING & WEAVING CO., LTD. Toman *Toabo Polypro* (P staple)

TONEN TAPYRUS K.K. (TONEN TAPYRUS CO., LTD.) Kawasaki *Tapyrus* (P spunbonded)

TOYOBO CO., LTD. Iwakuni (P staple)

UBE-NITTO KASEI CO., LTD. Fukuyama & Gifu *Bulkilon-F, Danline,Sun Line, Super Danline, Ube-Nitto Polypro, UNK UC Fiber* (E & P monofil & P yarn & E & P staple)

DAIDO KASEI Osaka

FUJIMOTO SANGYO Osaka

OKAMOTO CHEMICAL Ehime

SAKAI KASEI Osaka

SANTO CHEMICAL Aichi

SEKISUI CHEMICAL Amagasaki & Nara

TOYAMA Chiba

TOYO SODA Yokkaichi

WAKO SPINNING CO. Gifu

YAMAJIN TEXTILE Fukui

GLASS FIBER

ASAHI FIBER GLASS CO., LTD. Ibaraki & Shonan *Glasslon*

ASAHI-SCHWEBEL CO., LTD. Moriyama

CENTRAL GLASSFIBER CO., LTD. Matsusaka

JAPAN (continued)

FUJI FIBER GLASS CO. Moka

KANEBO, LTD. Gunma *Textoglass*

NIPPON GLASS FIBER CO., LTD. Tsu *Micro Glass*

THE NIPPON MINERAL FIBER MFG. CO. Tarui & Yuki *Superfine*

NITTO BOSEKI CO., LTD. Fukushima *Iceberg*

PARAMOUNT GLASS MFG. CO., LTD. Koriyama & Suzuka *Father Glass*

UNITIKA U.M. GLASS CO., LTD. Kyoto

KENYA

AFRICA SYNTHETIC FIBER LTD.

Nylon 6	Thika (yarn)
Polyester	Thika (staple)

JAYDEES LTD.

Polyester	Nairobi (yarn)

KENYA FIBRE CORPORATION LTD.

Polyester	Nanyuki (yarn & staple)

KISUMU COTTON MILL (KICOMI)

Polyester	Kisumu (yarn)

NAKURU INDUSTRIES

Polyester	(yarn)

SUNFLAG LTD.

Polyester	Nairobi (yarn)

OLEFIN FIBER

UNISACK LTD. Thika (P film)

KOREA
PEOPLE'S DEMOCRATIC REPUBLIC OF (NORTH)

A number of manufactured fiber plants are said to be operating in North Korea (see June 1970 *Organon* issue, page 113); however, no data for this country are recorded in any table of this issue due to lack of reliable information.

KOREA
REPUBLIC OF (SOUTH)

CHEIL SYNTHETIC INC.

Polyester	Kumi *Eslon* (yarn & staple)
Spandex	Kumi (yarn)

DAEHAN SYNTHETIC FIBER COMPANY

Polyester	Ulsan *Acelan* (yarn & staple)

KOREA
REPUBLIC OF (SOUTH) (continued)

GORYEO NYLON CORPORATION LTD.

Nylon 6	Kyungsan *Kolon* (yarn)

HANIL SYNTHETIC FIBER INDUSTRIAL COMPANY

Acrylic	Masan *Hanilon* (staple)

HAN KOOK FIBERS COMPANY LTD.

Polyester	Kumi* (yarn)

JEIL SYNTHETIC FIBERS COMPANY

Polyester	Seoul *Oplen* (yarn)

KOHAP, LTD.

Nylon 6	Shihung *Palmylon* (yarn & staple)
Polyester	Shihung *Palmylon* (yarn & staple)

KOLON INDUSTRIES INC.

Nylon 6	Kumi Taegu *Kolon* (yarn)
Polyester	Kumi *Kolon* (yarn)

SAMYANG COMPANY

Polyester	Chunju *Triron* (yarn & staple)

SUNKYONG INDUSTRIES LTD.

Acetate	Suwon *Sunkong* (yarn & tow)
Polyester	Suwon & Ulsan *Sunkong* (yarn & staple)

TAEKWANG INDUSTRIAL COMPANY

Acrylic	Ulsan *Acelan* (staple)
Spandex	Ulsan *Acelan* (yarn)

TONGKOOK SYNTHETIC FIBRES CO.

Polyester	Kumi *Texlon* (yarn)
Spandex	Kumi (yarn)

TONGYANG NYLON COMPANY

Nylon 6	Anyang & Ulsan *Toplon* (yarn)
Polyester	Ulsan *Toplon* (yarn)

TONGYANG POLYESTER COMPANY

Polyester	Ulsan *Toplon* (yarn)

WONJIN RAYON COMPANY

Rayon	Donong *Coray* (reg yarn) & (staple idle)

LIBYA

LIBYA NATIONAL OIL CORPORATION (LINOCO)

Nylon 6	Marsa Al-Brega* (yarn)
Polyester	Marsa Al-Brega* (staple)

LUXEMBOURG

TECHNOFIBRES

Polyester	Mertert (yarn)

Production and capacity data are combined with Belgium and the Netherlands under "Benelux" on pages 108 - 109.

LUXEMBOURG (continued)

OLEFIN FIBER

DU PONT FIBRES S.A. Contern-Hesperange *Typar* (P spunbonded)

MALAYSIA

ALIFFIL SYNTHETIC FIBRE SDN. BHD.

Polyester	Penang (yarn)

ALLIED MALAYAN TEXTILE BHD.

Rayon	Penang *Teteron* (yarn)

ARAB-MALAYSIAN DEVELOPMENT BHD.

Rayon	Perak *Teteron* (yarn)

CHEMPAKA NEGRI LAKSHMI TEXTILES SDN. BHD.

Polyester	Negeri *Sembilan* (yarn)
Rayon	Negeri *Teteron* (yarn)

HING YIAP FIBREMAKERS

Polyester	Johor (yarn)

KWALITY TEXTILES (M) SDN. BHD.

Polyester	Kedah *Teteron* (yarn)
Rayon	Kedah *Teteron* (yarn)

MWE SPINNING MILLS SDN. BHD.

Polyester	Penang *Teteron* (yarn)
Rayon	Penang *Teteron* (yarn)

PENFIBRE SDN. BHD.

Nylon	Penang* (staple)
Polyester	Penang (staple)

QUALINIT SDN. BHD.

Polyester	Penang (yarn)

SOUTEX SENDIRIAN BERHAD

Polyester	Batu Pahat (yarn & staple)

SOUTH ASIA FIBRE INDUSTRIES SDN. BHD.

Polyester	Perak (yarn)

TEXFIBRE (SELANGOR) SDN. BHD.

Polyester	Kuala Lumpur (yarn)

TOOTAL THREAD MALACCA SDN. BHD.

Polyester	Malacca (yarn)

VERTEX FIBRE SDN. BHD.

Nylon	Perak (yarn)

MALTA

NYLON KNITTING CO. LTD.

Nylon 6	Qormi (yarn)

Production and capacity data are combined with Italy.

MEXICO

CELANESE MEXICANA, S.A.

Acetate	Ocotlán, Jalisco (yarn & staple)
Nylon 6	Ocotlán & Toluca, México *Duracel, Nycel* (yarn & staple)
Polyester	Ocotlán, Querétaro & Toluca *Crolan* (yarn & staple)

CELULOSA Y DERIVADOS, S.A.

Acrylic	Atequiza, Jalisco *Crysel* (staple, tow & tops)
Rayon	Monterrey, Nuevo León (ind & reg yarn)

FIBRAS NACIONALES DE ACRILICO, S.A. (formerly FINACRYL)

Acrylic	Altamira (staple, tow & tops)

FIBRAS QUIMICAS, S.A.

Nylon 6	Monterrey, Nuevo León *Supernylon Cydsa* (yarn & monofil)
Polyester	Monterrey *Terlenka* (yarn)

FIBRAS SINTETICAS, S.A.

Acrylic	Cotaxtla, Veracruz *Fisisa* (staple, tow & tops)
Nylon 6	Mexico, D.F. *Fisisa* (yarn & monofil)
Polyester	Cotaxtla & México City *Fisisa* (yarn & staple)

FIBRASOMNI, S.A.*

Nylon 6	Ixtapalapa, D.F. *Omni-Nylon* (monofil)
Saran	Ixtapalapa *Omni-Saran* (monofil)

INDUSTRIAS PETROQUIMICAS MEXICANAS, S.A.

Polyester	El Salto, Jalisco *Inpetmex* (yarn)

KIMEX S.A.

Nylon 6	Tlalnepantla, México *Aztecron* (yarn)
Polyester	Tlalnepantla *Kintrel* (yarn)

NYLON DE MEXICO, S.A.

Nylon 6	La Leona, Nuevo León *Nylfil* (yarn & staple)
Polyester	La Leona *Dalcron* (yarn, staple, tow & fiberfill)
Spandex	La Leona *Likra* (fused multifil)

PLASTICA MODERNA, S.A. DE C.V.

Nylon 6	Tlalpan, D.F. *Perlux* (monofil)

PRODUCTOS PLASTICOS DE PUEBLA, S.A.

Nylon 6	Puebla, Puebla *Prolon* (monofil)

OLEFIN FIBER

FIBRASOMNI, S.A. Ixtapalapa, D.F. *Politen-Omni* (E monofil), *Polyprop-Omni* (P yarn & monofil)

INDUSTRIAS POLIFIL, S.A. Ixtacuixtla, Tlaxcala *Pliana* (P yarn & staple)

PLASTICOS INDUSTRIALIZADOS, S.A. Monterrey, Nuevo León (P staple)

OLEFIN FILM FIBER only

HILOS Y CORDELES, S.A. Tlalnepantla, México

MEXICO (continued)

PLASTICEL, S.A. Monterrey, Nuevo León (*Plasticel*)

POLISAC, S.A. (affiliate of Nylon de México, S.A.) Guadalajara, Jalisco (*Polisac*)

GLASS FIBER

VITRO-FIBRAS, S.A. Zacatenco, D.F. *Vitrofibras*

NETHERLANDS

AKZO FIBRES AND POLYMERS DIVISION, ENKA bv

Aramid	Emmen *Twaron* (yarn)
Nylon 6	Emmen *Enka, Enkastat, Enkalon* (yarn)
Polyester	Emmen *Diolen* (yarn & staple)
Rayon	Arnhem & Ede *Cordenka, Enka Viscose* (ind & reg yarn)

DU PONT DE NEMOURS (NEDERLAND) N.V.

Spandex	Dordrecht *Lycra* (fused multifil)

OLEFIN FIBER

LANKHORST TOUWFABRIEKEN B.V. Sneek *Tiptolene* (E monofil & P film)

T.T.C. POLYOLEFINS B.V. Nijverdal (P monofil, film & staple)

N.V. VERTO Rotterdam (P film)

GLASS FIBER

SILENKA B.V. Hoogezand (Groningen) *Silenka*

Artificial (cellulosic) production and capacity data are combined with Belgium on pages 112 - 115. Synthetic (noncellulosic) production and producing capacity data are combined with Belgium and Luxembourg under "Benelux" on pages 108 - 111.

NICARAGUA

OLEFIN FIBER

MANUFACTURERA CENTRO AMERICANA S.A. (MACEN) Managua (P film)

NIGERIA

INTEGRATED FIBERS

Polyester	Kano* (yarn)

NICHEMTEX INDUSTRIES LTD.

Polyester	Ikorodu, Lagos *Nigerlene* (yarn & staple)

SPINDEX SUNFLEG

Polyester	(yarn*)

NORWAY

OLEFIN FIBER

A/S PLATON, AVD. TEKSTIL Notodden *Filmtex* (E & P film)

NORFIL-NORPACK A/S Stavern, near Larvik *Akvaflex* (P yarn, E & P monofil & film)

STAL OG TAU Tonsberg *Norseflex* (P film)

GLASS FIBER

NORSK GLASSFIBER A/S Birkeland

PAKISTAN

BENGAL FIBER INDUSTRIES, C/O BENGAL OIL MILLS LIMITED

Nylon 6	Karachi *Nylpak* (yarn)
Polyester	Karachi (yarn & staple)

DILON LIMITED

Nylon 6	Landhi *Dilon* (yarn)
Polyester	(yarn*)

GATRON INDUSTRIES LIMITED

Polyester	Hub Chowki (yarn)

HASHWANI GROUP

Polyester	Sind Province (yarn)

ICI PAKISTAN MANUFACTURERS LTD.

Polyester	Lahore *Tere-Pak* (staple)

NATIONAL FIBERS LIMITED

Polyester	Korangi, Karachi (yarn & staple)

NILOM NYLON MILLS LIMITED

Nylon 6	Lyallpur *Nilom* (yarn & monofil)

PAK FIBRE INDUSTRIES LIMITED

Polyester	Hub Chowki (yarn)

POLYTEX

Polyester	(yarn)

RAVI RAYON LIMITED

Acetate	Kala Shah Kaku, Sheikhupura District *Krasil* (yarn)

RUPALI POLYESTER LIMITED

Polyester	Karachi (yarn & staple)

S.G. RAYON MILLS LIMITED

Polyester	Karachi (yarn)

SYNTHETIC POLYLON

Polyester	Katri (yarn), Hub Chowki (staple)

PERU

BAYER INDUSTRIAL S.A.

Acrylic	Lima *Dralon* (staple)

FILAMENTOS INDUSTRIALES, S.A.

Nylon 6	Lima* (yarn)
Polyester	Lima (yarn)

MANUFACTURA NYLON S.A.

Nylon 6	Vitarte, near Lima (yarn)
Polyester	Vitarte *Diolen* (staple)

MANUFACTURAS DEL SUR S.A.

Nylon 6	Arequipa *Long Life, Mistilon* (yarn)
Polyester	Arequipa (yarn & staple)

RAYON INDUSTRIAL S.A.

Acetate	Lima (yarn)
Nylon	Lima (staple)
Polyester	Lima *Forcel* (yarn, staple, tow & tops)

RETEX PERUANA, S.A.

Nylon 6	Ventanilla, Callao (yarn)

OLEFIN FILM FIBER only

NORSAC S.A. Trujillo

POLICEL DEL PERU S.A. Lima

SACOS DEL SUR S.A. Arequipa

SACOS PISCO S.A. Pisco

PHILIPPINES, REPUBLIC OF THE

FIBERTEX CORPORATION

Nylon 6	Taytay, Rizal *Texfiber* (yarn)

FILIPINAS SYNTHETIC FIBER CORPORATION

Polyester	Sta. Rosa, Laguna *Filsyn* (yarn & staple)

HI-LON MANUFACTURING CORPORATION

Nylon 6	Calamba, Laguna *Philippine Polyamide* (yarn)

INDOPHIL FIBER CORPORATION

Rayon	Manila (staple)

LAKEVIEW INDUSTRIAL CORPORATION

Polyester	Carmona, Rizal *Licron* (yarn & staple) (idle)

OLEFIN FIBER

INDUSTRIAL TEXTILE MANUFACTURING CO. (ITEMCOP) Mandaluyong, Rizal (P film)

MANILA CORDAGE COMPANY Manila (P film)

POLAND

CHODAKOWSKIE ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX"

Rayon	Sochaczew (reg yarn)

WROCŁAWSKIE ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX"

Rayon	Wrocław (reg yarn)

ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX-ANILANA"

Acrylic	Łódz *Anilana* (staple)
Azlon	Łódz *Wipolan* (staple, casein base)

ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX-CELWISKOZA"

Polyester	Jelenia Góra *Elana* (staple)
Spandex	Jelenia Góra (pilot plant) *Elaston* (yarn)

ZAKŁADY WŁOKIEN CHEMICZNYCH "ELANA"

Polyester	Torun, Bydgoszcz *Torlen* (yarn), *Elana* (staple)

ZAKŁADY WŁOKIEN CHEMICZNYCH "STILON"

Nylon 6	Gorzów Wielkopolski *Lanastil, Stilon* (yarn), *Polana* (staple)

ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX-WISKORD" *

Rayon	Szczecin-Zydowce (reg yarn)

ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX-WISTOM"

Rayon	Tomaszów Mazowiecki, Łódz (ind & reg yarn & staple)

OLEFIN FIBER

ZAKŁADY PRZEMYSŁU LNIARSKIEGO LENKO Bielsko-Biala (P film)

ZAKŁADY PRZEMYSŁU LNIARSKIEGO SKARBKOW Mirsk, Wrocław (P staple)

ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX-WISKORD" Szczecin-Zydowce (P staple)

GLASS FIBER

KROSNIENSKIE HUTY SZKŁA Krosno

ZAKŁADY WŁOKIEN CHEMICZNYCH "CHEMITEX-ANILANA" Łódz *Polsilon*

PORTUGAL

COMPANHIA INDUSTRIAL DE FIBRAS ARTIFICIAIS (CIFA), S.A.R.L.

Nylon 6	Sobrado, Valongo *Cifalon* (yarn)
Rayon	Sobrado (reg yarn & staple)

FIBRAS SINTÉTICAS DE PORTUGAL, S.A.R.L. (FISIPE)

Acrylic	Lisbon *Vonnel* (staple, tow & tops)

PORTUGAL (continued)

FINICISA - FIBRAS SINTÉTICAS, S.A.R.L.

Polyester	Portalegre, Alto Alentejo *Terylene* (staple)

HOECHST PORTUGUESA S.A.R.L.

Nylon	Porto (monofil)

TÊXTIL ARTIFICIAL DO PORTO, LDA.

Rayon	Porto (reg yarn)

OLEFIN FIBER

ALICATIFAS DA LOUSA (P staple)

FERCOL (P staple)

LUSOTUFO (P staple)

QUIMIGAL - QUIMICA DE PORTUGAL, E.P. Barreiro (P staple & film)

OLEFIN FILM FIBER, only

CERFIL Maia - Douro

CORDEX - COMPANHIA INDUSTRIAL TEXTIL, S.A.R.L. Esmoriz

COTESI - COMPANHIA DE TEXTEIS SINTETICOS S.A.R.L. Carvalhos

EUROFIL - INDUSTRIAS DE PETROLEOS PLASTICOS E FILAMENTOS, S.A.R.L. Lisbon

FABRICA DE TAPETES VITÓRIA Mira d'Aire

FERNANDES & COSTA, LDA. Seia

MANUEL RODRIGUES DE LIMA & FILHOS Cortegaca

MANUEL RODRIGUES D'OLIVEIRA, S.A. LDA. M. Maia

QUINTAS & QUINTAS Povoa do Varzim

SICOR - SOCIEDADE INDUSTRIAL DE CORDOARIA S.A.R.L. Cortegaca

GLASS FIBER

QUIMIGAL - QUIMICA DE PORTUGAL, E.P. Barreiro

ROMANIA

CIMBINATUL DE FIBRE SINTETICE CIMPULUNG MUSCEL

Polyester	Near Brasov (yarn)

COMBINATUL DE FIBRE ARTIFICIALE

Rayon	Braila, Dej* & Suceava* (ind yarn & staple)
Polyester	Vaslui (yarn)

FABRICA DE FIBRE ARTIFICIALE "VISCOFIL"

Rayon	Popesti-Leordeni, near Bucuresti (reg yarn)

ROMANIA (continued)

FABRICA DE FIBRE ARTIFICIALE "VISCOZA"

Rayon	Lupeni (reg yarn)

INTREPRINDERA DE FIBRE SINTETICE CORABIA

Polyester	North of Pleven (yarn)

UZINA DE FIBRE SINTETICE IASI

Polyester	Iasi *Teron* (yarn, staple, tow & tops)

UZINA DE FIBRE SINTETICE SAVINESTI

Acrylic	Savinesti, near Piatra Neamt (Bacau Region) *Melana* (staple & tops)
Nylon 6	Savinesti *Relon* (yarn & staple)

SAUDI ARABIA

ALASTRA

Polyester	Yanbu* (staple)

SOUTH AFRICA, REPUBLIC OF

BELGOTEX (Beaulieu Group)

Nylon 6	(yarn)

CONSOLIDATED TEXTILE MILLS (part of Frame Group of Companies)

Polyester	Jacobs, Natal (yarn & staple - captive)

HOECHST SOUTH AFRICA (PTY.) LTD.

Polyester	Milnerton, Cape Province *Trevira* (staple)

ROMATEX MILLS *

Nylon 6	Jacobs, Natal (staple)

SOUTH AFRICAN NYLON SPINNERS (PTY.) LIMITED

Nylon 66	Bellville, Cape Province *Bri-Nylon* (yarn)
Polyester	Bellville & Hammarsdale, Natal *Terylene* (yarn)

OLEFIN FIBER

ROMATEX MILLS Jacobs, Natal (P film & staple)

SPAIN

BRILEN S.A.

Polyester	Barbastro, Huesca & Igualada, Barcelona (yarn & staple)

COURTAULDS FIBRES S.A.

Acrylic	Prat de Llobregat, Barcelona *Courtelle* (staple & tow)

DE FIBER S.A.

Nylon 66	Vendrell, Tarragona

INDUSTRIAS DEL ACETATO DE CELULOSA, S.A. (INACSA)

Acetate	La Batlloria, Barcelona (yarn)

INDUSTRIAS QUIMICAS TEXTILES S.A. (INQUITEX)

Nylon 6	Andoain, Guipuzcoa *Carbyl, Nylhair, Trinyl* (yarn & staple)

SPAIN (continued)

LA SEDA DE BARCELONA, S.A.

Nylon 6	Alcalá de Henares, Madrid *Dayan, Enkalon* (yarn & staple)
Polyester	Prat de Llobregat, Barcelona *Terlenka* (yarn & staple)
Rayon	Prat de Llobregat (reg yarn)

MONTEFIBRE HISPANIA S.A.

Acrylic	Miranda de Ebro, Burgos *Leacril* (staple)

NUREL S.A.

Nylon 6	Zaragoza, Zaragoza *Nurel* (yarn & staple)
Polyester	Zaragoza *Terylene* (yarn & staple)

RHÔNE - POULENC FIBRAS S.A. (formerly SOCIEDAD ANONIMA DE FIBRAS ARTIFICIALES (SAFA)

Nylon 66	Blanes & San Julian de Ramis, Gerona *SAFA* (yarn & staple)
Polyester	Blanes *Tergal, Teriber* (yarn & staple)

SOCIEDAD NACIONAL DE INDUSTRIAS APLICACIONES CELULOSA ESPANOLA, S.A. (SNIACE)

Nylon 6	Torrelavega, Santander *Lilion* (yarn & staple)
Rayon	Torrelavega (staple)

OLEFIN FIBER

PAULAR, S.A. - EMPRESA PARA LA INDUSTRIA QUIMICA Puertollano, C.R. *Istrakin* (P monofil & film)

PROFILEX (P staple)

PROPILAN (P staple)

SERINA TEXTIL (P staple)

SOCIEDAD ANONIMA ITALO ESPANOLA (SAITES) Sabadell, Barcelona (P staple & film)

TEXTILE ARMENGOL Bruch, Barcelona (P staple & film)

OLEFIN FILM FIBER, only

CONDEROLS S.A. Granada

CORDELERIAS BARAS S.A. Gijon, Asturias

CORDELERIAS MAR S.A. Vigo, Pontevedra

HILATURAS Y CORDELERIA S.A. - "HILCOSA" Barcelona

HIRESA Callosa de Segura, Alicante

YUTE INDUSTRIAL S.A. Valencia

GLASS FIBER

CRISTALERIA ESPANOLA - DIVISION FIBRA DE REFUERZO Alcalá de Henares, Madrid *Fibra de Refuerzo VETROTEX*

SRI LANKA

CEYLON PETROCHEMICAL CORPORATION
Nylon 6 — Sapugaskan (yarn & monofil)

SWEDEN

SVENSKA RAYON AKTIEBOLAGET
Rayon — Alvenäs, Valberg (staple)

OLEFIN FIBER

SONDEX AB Malmö *Laveten* (E & P monofil)

GLASS FIBER

SCANDINAVIAN GLASFIBER AKTIEBOLAG Falkenberg

SWITZERLAND

EMS INDUSTRIES, LTD.
Nylon 6 — Ems, Graubünden *Grilon* (staple)
Polyester — Domat/Ems *Grilene* (staple)

NOYFIL S.A.
Nylon 6 — Stabio (yarn)
Polyester — Stabio (yarn)

VISCOSUISSE A.G.
Nylon 6/66 — Emmenbruecke, Luzern & Widnau, St. Gallen *Nylsuisse, Flixor* (yarn & staple)
Polyester — Widnau *Tersuisse* (yarn)

OLEFIN FILM FIBER, only

AROVA SCHAFFHAUSEN A.G. Schaffhausen

POLY-STEGN A.G. Flurlingen

VOGT & CO. Reinach

TAIWAN

BAN SHIN FIBER CO., LTD.
Nylon 6 — Kaohsiung *Sun & Colorful Seal* (yarn)

CENTURY EVERGREEN CORP.
Polyester — Tainan *Centuron* (yarn)

CHENTA CHEMICAL INDUSTRIAL CORPORATION
Nylon 6 — Kaohsiung *Rabbit* (yarn)

CHI YURN FIBER MILLS
Nylon — Tao Yuan (staple)

CHINA MAN-MADE FIBER CORPORATION
Rayon — Tou Fen *Queen* (reg yarn & staple)

CHUNG SHING TEXTILE CO., LTD.
Nylon 6 — Tao Yuan *Tasinlon, Threegun* (yarn)
Polyester — Tao Yuan *Tasinlon* (yarn & staple)

TAIWAN (continued)

FAR EASTERN LTD.
Polyester — Hsin Chu *Eastlene, Eastlon* (yarn & staple)

FORMOSA CHEMICALS & FIBER CORPORATION (part of Formosa Plastics Group)
Nylon 6 — Chang Hwa *Sunylon* (yarn)
Rayon — Chang Hwa & Longder *Tairiyon* (staple)

FORMOSA PLASTIC CORPORATION - Tairylan Plant (part of Formosa Plastics Group)
Acrylic — Kaohsiung & Lanchu *Tairylan* (staple, tow & tops)

FUPONT SYNTHETIC INDUSTRIAL CO.
Nylon 6 — Tao Yuan *Full-long* (yarn)

HUALON CORPORATION
Nylon 6 — Chungho, Tao Yuan & Tou Fen (yarn)
Polyester — Chungho, Tou Fen & Yim Kao *Hualon* (yarn & staple)

HUNG CHOU CHEMICAL INDUSTRY COMPANY, LTD.
Polyester — Kwei Shan *Hunvira* (yarn)

JANG DAH NYLON INDUSTRIAL CORP., LTD.
Nylon 6 — Hsin Tien *Yuan Pao* (yarn)

NAN-YA PLASTIC CO., POLYESTER FIBER DIVISION (part of Formosa Plastics Group)
Polyester — Tai Shan *Tairilin* (yarn & staple)

SAN YUAN HSING ENTERPRISE COMPANY
Nylon 6 — Kaosiung (monofil - captive)

SHINKONG SYNTHETIC FIBERS CORPORATION
Polyester — Tao Yuan *Shinlon* (yarn & staple)

SYNTHETIC FIBER MILLS CORPORATION
Nylon 6 — Tao Yuan *Synlon* (yarn)

TA MING FIBERS INDUSTRIAL CORPORATION
Nylon 6 — Tao Yuan *Ta Ming Nylon* (yarn)
Polyester — Tao Yuan *Poylon* (yarn)

TAINAN SPINNING CO., LTD.
Polyester — Tainan & Tao Yuan *Nanlon* (yarn)

TONG HWA SYNTHETIC FIBER CO., LTD.
Acrylic — Chu Pei *Townflower* (staple & tow)

TUNG HO SPINNING WEAVING & DYEING CO., LTD.
Polyester — Tainan *Pearlylene* (staple)

TUNTEX DISTINCT CORP.
Polyester — Hsin Su *Tuntex* (yarn & staple*)

UNITED SYNTHETIC FIBERS CORPORATION
Polyester — Tao Yuan *King Long* (staple)

VANLON FIBERS INDUSTRIAL CORPORATION
Nylon 6 — Tao Yuan *Vanlon* (yarn)
Polyester — Tao Yuan *Vanlon* (yarn)

TAIWAN (continued)

YU HO FIBER INDUSTRIAL CORPORATION
Polyester Tao Yuan *Luxlen* (yarn)

OLEFIN FIBER

CHIA YANG INDUSTRIAL CO., LTD. Hsi-Chih (P monofil)

CHIEN SUN PLASTIC INDUSTRIAL CO., LTD. Hsin-Chu (E & P film)

CHINA FOLEX CORPORATION Shih-Lin (E & P monofil)

CHUNG KUANG PLASTIC CO., LTD. Chang-Hua (E & P film)

FULLMARK INDUSTRIAL CO., LTD. Hsin-Chu (E & P monofil)

FUU WON CHEMICAL INDUSTRIAL CO., LTD. Tu-Chen (P yarn)

HSIEH CHIN FISHING NET COMPANY, LTD. Kaohsiung *Hsieh Chin* (E monofil - captive)

HUNG FENG ENTERPRISE CO., LTD. Yang-Mei (P monofil)

IEN YI FIBER INDUSTRIAL CO., LTD. Chi-Do Goble (E monofil)

JUI I CHEMICAL INDUSTRIAL CO., LTD. Tou-Yuan (E & P monofil)

KUO HSIANG ENTERPRISE CO., LTD. Yang-Mei (E & P monofil)

LIEN FU CHEMICAL COMPANY LTD. Tou-Fen (E & P monofil)

MEI LON FIBER CO., LTD. Chang-Hua (E monofil)

PAO TSUNG TAI INDUSTRIAL COMPANY LTD. Tainan (P film)

POLON FIBER INDUSTRIAL CO., LTD. Chung-Li (P monofil)

SAN YANG INDUSTRIAL COMPANY LTD. Nei Hu Hsiang (P film)

TAI YEE CHEMICAL INDUSTRIAL CO., LTD. Chung-Li (E & P monofil)

UNITED FIBER INDUSTRIAL CO., LTD. Chung-Li (E & P monofil)

YAO CHENG PLASTIC CO., LTD. Pan-Chiao (P yarn)

TANZANIA

SUN FLAG TEXTILE KNITWEAR MILLS LTD.
Polyester Arusha (yarn)

THAILAND

ASIA FIBER CO., LTD.
Nylon 6 Samut Prakarn *AFC* (yarn)

THAILAND (continued)

CHIEM PATANA SYNTHETIC FIBRE LTD.
Polyester Ratchaburi Prov. (yarn & staple*)

HANTEX CORPORATION LTD.
Nylon 6 Mahacha, Samut Sekorn (yarn)

ORIENTAL FIBRE
Polyester Samut Sakorn (yarn)

SIAM POLYESTER CO., LTD.
Polyester Bangkok (yarn & staple*)

TEIJIN POLYESTER (THAILAND) LTD.
Polyester Pathumthani, Bangkok *TEIJIN TETORON* (yarn & staple)

THAI ACRYLIC FIBER
Acrylic (staple)

THAI MELON POLYESTER CO. LTD.
Polyester Pathumthani, Bangkok (yarn & staple)

THAI NYLON CO., LTD.
Nylon (yarn*)

THAI RAYON CO., LTD.
Rayon Ang Thong (staple)

THAI TAFFETA CO., LTD.
Nylon 6 Bangkok (yarn*)

TORAY NYLON THAI COMPANY
Nylon 6 Bangkhen, Bangkok *TNT* (yarn & monofil)
Polyester Bangkhen *TNT* (yarn)

TUNTEX (THAILAND) CO., LTD.
Polyester (yarn & staple*)

TURKEY

AKRILIK KIMYA SANAYII A.S. (AKSA)
Acrylic Yalova *Aksa* (staple)

DUSA ENDUSTRIYEL IPLIK SANAYII VE TICARET A.S.
Nylon 6 Izmit (yarn)

FILAMENT SENTETIK IPLIK VE ELYAF SANAYII A.S.
Polyester Bursa *Filament* (yarn & staple)

GEMLIK SUNI IPEK VE VISKOZ MAMULLERI SANAYII MUESSESESI (GEMLIK ARTIFICIAL SILK & VISCOSE PRODUCTS INDUSTRY) (Operated by the Sumerbank)
Rayon Gemlik (yarn & staple)

INSA ISTANBUL NAYLON SANAYII A.S.
Nylon 6 Istanbul *Islon* (yarn)
Polyester Istanbul (yarn)

M.N. SABUNCU
Polyester Adana *MNS* (yarn) (idle)

TURKEY (continued)

NERGIS A.S.

Polyester	Bursa (yarn)

POLYLEN SENTETIK IPLIK SANAYII A.S.

Polyester	Bursa *Polylene* (yarn)

SANCAK TUL SANAYII LTD., STI.

Polyester	Istanbul *Lalelen* (yarn) (idle)

SASA SUNI VE SENTETIK ELYAF SANAYII A.S.

Polyester	Adana *Perilon* (yarn & staple)

SENTETIK IPLIK FABRIKALARI, A.S. (SIFAS)
(SYNTHETIC YARN FACTORIES CORPORATION)

Nylon 6	Bursa *SIFAS* (yarn & staple)
Nylon 66	Bursa (yarn)
Polyester	Bursa (yarn & staple)

SISAS

Polyester	Canakkale* (yarn)

TEKSTIPLIK SANAYII VE TICARET A.S.

Nylon 6	Edirne *Dimlon* (yarn)

YALOVA ELYAF VE IPLIK SANAYII VE TICARET A.S.

Acrylic	Yalova *Yalova* (staple & tow)
Modacrylic	Yalova *Yalova* (staple & tow)

OLEFIN FIBER

BEZCI ELYAF SANAYII A.S. Istanbul

DINARSU ELYAF SANAYII A.S. Cerkazkoy, Tekirdag (P staple)

ELSAN ELYAF SANAYII VE TICARET A.S. Istanbul (P staple)

HALICIOGLU ELYAF SANAYII A.S. Haskoy, Istanbul (P staple)

SESAS ELYAF SANAYII A.S. Istanbul

GLASS FIBER

CAM ELYAF SANAYII A.S. Cayirova-Gebze (Izmit)

UNION OF SOVIET SOCIALIST REPUBLICS

RAYON PLANTS reported at:
Balakovo, Barnaul, Cherkassy (Ukraine), Kalinin, Kamensk, Kiev, Klin, Krasnoyarsk, Leningrad, Mogilev, Ryazan, Saratov, Sokol, Sverdlovsk and Svetlogorsk.
ACETATE PLANTS reported at:
Engels, Fergana, Kirovakan and Moscow.
NYLON PLANTS reported at:
Barnaul, Chernigov, Daugavpils, Engels, Grodno, Kemerovo, Kiev, Klin, Leningrad, Rustavi, Shchekino and Zhitomer.
SYNTHETIC (NONCELLULOSIC) FIBER PLANTS rep[illegible] at:
Kursk (polyester), Blagoveshchensk (polyester*), Kus[illegible]ay (vinyon), Minsk (polyester), Mogilev (polyester), Navoi, Polotsk and Saratov(acrylic+modacrylic), Svetlogorsk (polyester).
GLASS FIBER PLANTS reported at:
Astrakhan, Kalinin, Khabarovsk, Leningrad, Mingechaur, Moscow, Polotsk, Salevat, Saratov, Sevan and Severodonetsk.

UNITED KINGDOM

COURTAULDS FIBRES LTD.

Acrylic	Grimsby, South Humberside *Courtelle* (staple & tow) *Courtek M* (bioactive staple) *Sekril* (high modulus staple)
Modacrylic	Coventry, West Midlands *Teklan* (staple & tow) *Neochrome FR* (staple & tow)
Polyacrylate	Coventry *Inidex* (staple)
Rayon	Grimsby *Sanille* (staple) *Viloft* (staple & tow), Grimsby *Tencel*, (solvent-spun staple & tow)
Acetate	Coventry; Spondon, Derbyshire *Dicel* (yarn & tow)
Triacetate	Spondon *Tricel* (yarn)

DEAN DOVE LTD.

Polyester	Stanley, Durham (yarn)

DU PONT (U.K.) LTD.

Aramid	Maydown, *Kevlar* (yarn)
Spandex	Maydown, Londonderry, N. Ireland *Lycra* (fused multifil)

ECTONA FIBRES LTD.

Acetate	Siddick, Workington (cigarette tow)

HOECHST FIBRE INDUSTRIES U.K. LTD.

Polyester	Limavady, Londonderry, N. Ireland *Trevira* (yarn & monofil)

ICI FIBRES (part of ICI Chemicals and Polymers Ltd.)

Biconstituent	Doncaster, Yorkshire (staple)
Nylon 66	Doncaster, Gloucester, Gloucestershire; Pontypool & Wales *Bri-Nylon, Qazul, Quintesse, Tactel, Tactesse, Tendrelle, Timbrelle* (yarn, staple & tow)
Polyester	Pontypool *Terinda, Terylene* (yarn)

NYMOFIL PLC

Nylon 6/66	Poulton-le-Fylde, Lancashire (monofil)
Polyester	Poulton-le-Fylde (monofil)

PENNINE FIBRE INDUSTRIES LTD.

Nylon 6/66	Bradford (monofil)
Polyester	Bradford, West Yorkshire (staple & tow)

PERI-LUSTA PLC

Nylon 6/66	Leek, Staffordshire (monofil)

OLEFIN FIBER

BELFAST ROPEWORK CO. PLC Birmingham, W. Midlands *Bluebell* (E & P monofil, P yarn, staple & film)

DON & LOW (HOLDINGS) LTD. Forfar, Angus, Scotland (P yarn, monofil, staple & film)

F. DRAKE (FIBRES) LTD. Golcar, Huddersfield, Yorkshire *Gymlene* (P staple)

F. DRAKE & CO. OF GOLCAR LTD. Golcar, Huddersfield (P yarn)

HALL'S BARTON ROPERY LTD. Beverley N. Humberside (P film and E & P monofil)

UNITED KINGDOM (continued)

WM. HALLEY & SONS (MFG.) LTD. Dundee, Scotland

OAKDALE YARNS Crumlin, Gwent, Wales (P yarn)

PLASTICISERS LTD. Drighlington, Yorkshire *Drylene* (E monofil); *Charisma, Duron, Fibrite, Tritor* (P yarn, monofil, film & staple)

POLYOLEFIN FIBRES & ENGINEERING LTD. Halifax, Yorkshire *Downspun* (P staple)

READICUT INT'L. PLC. Brighouse, W. Yorks

J & D WILKIE LTD. Kitriemuir, Angus, Scotland

OLEFIN FILM FIBER, only

AMOCO FABRICS & FIBERS CO., DIVISION OF AMOCO (U.K.) PLC Consett, Dundel, Durham

BONAR TEXTILES Dundee, Scotland

BRIDON FIBRES & PLASTICS LTD. Gateshead & Sunderland, Durham & Wallsend, Northumberland *Broplene, Red Star, Viking*

SCOTT & FYFE LTD. Tayport, Fife, Scotland

A.G. SCOTT TEXTILES LTD. Dundee, Scotland

SMITH & NEPHEW TEXTILES LTD. Newhey, near Rochdale, Lancashire *Polyweave*

SYNTHETIC INDUSTRIES (IRELAND) LTD. Newry, Down, N. Ireland

GLASS FIBER

FIBREGLASS PLC (subsidiary of Pilkington Brothers PLC) Wrexham, Clwyd, Wales *Fibreglass*

T GLASS FIBRES PLC Camberley, Surrey & Hindley Green, Lancashire

FIBREGLASS-REGINA, a joint venture of **FIBREGLASS PLC** and the **BBA GROUP PLC,** is producing textile glass tissue (voile) at Liversedge and St. Helens, Merseyside.

PPG GLASS FIBRES, LTD. Hindley Green, Wigan, Lancashire

UNITED STATES OF AMERICA

ALBANY INTERNATIONAL - MONOFILAMENT PLANT *

Fluoro	Homer, NY *Halar, Kynar, Tefzel* (monofil)
Nylon 6, 66 & 612	Homer (monofil)
Polyester	Homer (monofil - regular & hydrolysis-resistant)

UNITED STATES OF AMERICA (continued)

ALLIED-SIGNAL INC. ENGINEERED MATERIALS SECTOR, FIBERS DIVISION *

Nylon 6	Columbia, SC & Hopewell, VA *A.C.E., Anso-Tex, Anso IV HP, AnsoV Worry Free, Anso X, Capima, Caplana, Caprolan, Caprolan 2000, Caprolan 2000 Sea Gard, Caprolan 2000 Stay Gard, Capima, Captiva, Compet, Creme De Captiva, Hydrofil, Iron Clad Patina, Sea Gard,TEC* (yarn,monofil & staple)
Polyester	Moncure, NC *A.C.E., A.C.E. Sea Gard, Compet, Stay Gard* (yarn & monofil)

AMERICAN CYANAMID COMPANY, FIBERS DIVISION

Acrylic	Milton, FL *Creslan* (staple & tow)

AMERICAN POLYCRAFT, INC. *

Nylon 6	Dalton, GA (yarn)

AVTEX FIBERS INC.

Polyester	Lewistown, PA *Avlin* (yarn)

BASF CORPORATION FIBERS DIVISION

Nylon 6	Enka, NC, Anderson & Central, SC and Lowland, TN *Crepeset, Shimmereen, Vivana, Zefsport, Zeftron, Zeftron 500, Zeftron 500 ZX* (yarn & staple)
Polyester	Lowland *Golden Glow, Golden Touch, Silky Touch, Strialine, Ultra Touch* (yarn)
Rayon	Lowland *Zantrel, Zantrel Plus*™ (staple)

BEAULIEU OF AMERICA, INC.*

Nylon 6	Bridgeport, AL (yarn)

BERKLEY & CO., INC. *

Nylon 6	Spirit Lake, IA (monofil)

CAMAC CORPORATION (a subsidiary of Cookson America, Inc.)

Nylon 6	Bristol, VA *Camalon* (yarn)

COLOR-FI, INC. *

Nylon	Sumter & Trenton, SC (staple & tow)
Polyester	Sumter & Trenton (staple)

CONCORDE FIBERS, INC.

Nylon 6	Jamestown, SC (yarn)

CORTLAND LINE COMPANY, INC.

Nylon 6	Cortland, NY (monofil - captive)

COURTAULDS FIBERS INC.

Rayon	Le Moyne, Mobile County, AL *Fibro* (staple)

DORSETT CARPET MILLS INC. *

BCF YARN DIVISION

Nylon 6	Chatsworth, GA (yarn)

E.I. DU PONT DE NEMOURS & COMPANY (INC.) •

FIBERS DEPARTMENT •

Acrylic*	Camden, SC & Waynesboro, VA *Orlon* (staple & tow) ***Shutdown announced**
Aramid	Richmond, VA *Kevlar* (yarn), *Nomex* (yarn, staple & tow)
Nylon 66	Seaford, DE, Camden, SC, Chattanooga, TN and Martinsville, Richmond & Waynesboro, VA *Antron* (yarn, monofil, staple & tow)
Polyester	Kinston & Wilmington, NC, Camden & Charleston, SC *Dacron* (yarn, staple, tow & fiberfill)
Spandex	Waynesboro *Lycra* (fused multifil or coalesced monofil)

POLYMER PRODUCTS DEPARTMENT

Nylon 6, 66, 612 & Polyester	Parkersburg, WV *Dacron, Dymetrol, Tynex, Vylor* (monofil of 50 denier & coarser)

EASTMAN KODAK COMPANY - EASTMAN CHEMICAL COMPANY

Acetate	Kingsport, TN *Chromspun, Estron* (yarn)
Polyester	Kingsport, TN *Kodel* (staple)

FIBER INDUSTRIES (a Wholly Owned Subsidiary of Wellman, Inc.)

Polyester	Fayetteville, NC & Darlington, SC *Fortrel* (yarn & staple)

FIRESTONE FIBERS & TEXTILES COMPANY, DIVISION OF BRIDGESTONE/FIRESTONE, INC.

Polyester	Hopewell, VA (yarn)

FOSS MANUFACTURING CO., INC. •

Polyester	Haverhill, MA (staple - captive)

GATES FORMED FIBER PRODUCTS, INC.

Polyester	Auburn, ME (staple)

GLOBE MANUFACTURING CO.

Spandex	Fall River, MA & Gastonia, NC *Cleerspan, DC-*$_{100}$, *DC-*$_{700}$, *Glospan* (fused multifil)

THE GOODYEAR TIRE & RUBBER COMPANY, POLYESTER DIVISION

Polyester	Scottsboro, AL & Point Pleasant, WV (yarn - captive)

GOLCO •

Nylon	Cartersville, GA (yarn)

GUILFORD FIBERS
GUILFORD MILLS, INC.

Nylon 6	Gainesville, GA (monofil)
Polyester	Fuquay-Varina, NC (yarn & monofil)

GULF FIBERS INC.

Nylon 6	Le Moyne, Mobile County, AL (monofil)

HOECHST CELANESE CORPORATION

Acetate	Rock Hill, SC *Celriver* and Narrows, VA *Celco* (yarn, staple & tow)
Polyester	Salisbury & Shelby, NC and Spartanburg, SC *Ceylon, Comfort Fiber, ESP, Loftguard Polar-Guard, Premafill Soft, Premafill Plump Serene, Superba, Trevira* (yarn, staple, tow, highloft & spunbonded)
PBI	Rock Hill (staple)

IMAGE CARPETS, INC.

Polyester	Armuchee, GA (staple)

JAMES RIVER CORP. •

Nylon 6/66	Cantonment, FL *Cerex* (spunbonded)
Polyester	Milford, NJ and Simpsonville, SC, *Polyweb* (thermal bond & meltblown)

JOHNSON FILAMENTS, INC. •

Nylon 6/66	Williston, VT (monofil)
Polyester	Williston (monofil)

KAYSER-ROTH CORPORATION
YARN MANUFACTURING DIVISION

Nylon 66	Creedmoor, NC (yarn - captive)

KETEMA INC., SPECIAL FILAMENTS DIVISION •

Nylon 6, 66, 612 & 610	Odenton, MD (monofil)
Polyester	Odenton (monofil)
Saran	Odenton (monofil)

MANN INDUSTRIES, INC.

Acrylic	Williamsburg, VA *Zefran, Zefkrome* (staple)

MONOFILAMENTS, INC.

Nylon 6/66	Waynesboro, VA (monofil)
Polycarbonate	Waynesboro (monofil)
Polyester	Waynesboro (monofil)

MONSANTO CHEMICAL COMPANY
FIBERS AND ENGINEERED PRODUCTS DIVISION

Acrylic	Decatur, AL *Acrilan, Acrilan II, Bi-Loft, Cy-Fana, Du-Rel, Fi-Lana II, Pa-Qel, Pil-Trol, So-Lara, So-Qel* (staple & tow)
Modacrylic	Decatur *SEF, SEF Plus* (staple & tow)
Nylon 66	Pensacola, FL & Greenwood, SC *No-Shock, Ultron* (yarn, monofil & staple)

NORTH AMERICAN POLYESTER CORPORATION (subsidiary of North American Rayon Corporation)

Polyester	Elizabethton, TN (staple)

NORTH AMERICAN RAYON CORPORATION

Rayon	Elizabethton, TN (ind & reg yarn & tow)

PHILLIPS FIBERS CORPORATION• (subsidiary of Phillips 66 Company)

Sulfar	Rocky Mount, NC *Ryton* (staple)

UNITED STATES OF AMERICA (continued)

REEMAY, INC. •

Polyester	Old Hickory, TN *Reemay* (spunbonded)

SHAKESPEARE COMPANY, MONOFILAMENT DIVISION •

Nylon 6/66/610	Columbia, SC (monofil thread)
Polyester	Columbia (monofil thread)

STAR FIBERS, INC.

Nylon 6/66	Edgefield, SC *Starbrite* (staple)

TOLARAM FIBERS, INC.•

Nylon 66	Ansonville, NC (yarn)
Polyester	Ansonville & Asheboro (yarn)

WELLMAN, INC., MAN-MADE FIBER DIVISION

Nylon 6/66	Johnsonville, SC *Wellon, Wellstrand* (staple, tow & tops)
Polyester	Johnsonville *Fillwell, Fortrel, Wellene, Wellstrand* (staple & tow)

YKK ZIPPER CO.

Polyester	Macon, GA (yarn)

OLEFIN FIBER

ACS INDUSTRIES, INC. Woonsocket, RI (P yarn, monofil & multifil)

ALADDIN MILLS, INC. Dalton, GA (P yarn)

ALBANY INTERNATIONAL - MONOFILAMENT PLANT Homer, NY (P monofil)

ALLIED-SIGNAL, INC. ENGINEERED MATERIALS SECTOR, FIBERS DIVISION Chesterfield, VA *Spectra* (E yarn & staple)

AMERICAN MANUFACTURING COMPANY LAFAYETTE ROPE DIVISION Lafayette, LA *Amco, American, Bondtie, Floterope, Ultraline* (E & P monofil & film)

AMERICAN POLYCRAFT, INC. Dalton, GA (P yarn & film)

AMOCO FABRICS & FIBERS COMPANY Andalusia & Roanoke, AL, Bainbridge, Hazlehurst & Nashville, GA, Salisbury, NC & Afton, VA *Amoweve, Condesa, Genesis, Marquésa Lana, Marquésa Lana ST, Pation, Pation Plus, Propex III, Synera* (P yarn, monofil, film & staple)

ARLIN MFG. CO., INC. Lowell, MA (P film)

BEAULIEU OF AMERICA, INC. Bridgeport, AL & Dalton, GA (P yarn)

BERKLEY & CO. INC. Spirit Lake, IA (E & P monofil - captive)

BLUE MOUNTAIN INDUSTRIES Blue Mountain, AL *Poly Tying Twines, Polylasting, TY-EZ Polytapes* (E & P film)

BRIDON CORDAGE INC. Albert Lea, MN (P film cordage)

BURLINGTON INDUSTRIES, INC. Greensboro, NC (P yarn)

CALIFORINA WEBBING INDUSTRIES, INC. Los Angeles, CA (P yarn)

UNITED STATES OF AMERICA (continued)

CARRIAGE INDUSTRIES Calhoun, GA (P yarn)

CHASE PACKAGING CORPORATION Portland, OR (P film industrial goods)

CIRTEX Dalton, GA (P film)

COLOR-FI, INC. Sumter, SC (staple)

COLUMBIAN ROPE COMPANY Guntown, MS *Polypro 6* (E & P monofil & film)

CROWE ROPE COMPANY Warren, ME *Crowelon* (P monofil & film)

CUMBERLAND MILLS, INC. Dalton, GA (P yarn)

CUTLASS CARPET COMPANY Dalton, GA (P yarn)

DIAMOND MILLS, INC. Eton, GA (P yarn & film)

DORSETT CARPET MILLS INC. BCF YARN DIVISION Chatsworth, GA (P yarn)

E.I. DU PONT DE NEMOURS & COMPANY (INC.), FIBERS DEPARTMENT Richmond, VA *Tyvek* (E spunbonded), Chattanooga, TN (P yarn)

ELIZABETH WEBBING MILLS CO., INC. Central Falls, RI (P yarn & film)

ENSIGN-BICKFORD INDUSTRIES, INC., FILM FIBERS DIVISION Simsbury, CT *E-B Mesh®*, chopped fibers for concrete (P film)

EXXON CHEMICAL COMPANY, CONSTRUCTION, FABRICS & AGRICULTURAL Kingman, KS; Summerville, SC and Clearfield, UT (P monofil & film)

FIBERS & FABRICS OF GEORGIA, INC. (subsidiary of Georgia Synthetics, Inc.) Elberton, GA (PP yarns, fibrillated, roll embossed filaments & slit tape)

FIBRES SOUTH, INC. Trussville, AL *Polystar, Trustite, Tyrite* (P film, monofil, tapes & staple)

FILAMENT FIBER TECHNOLOGY INCORPORATED Bay Head, NJ and Salisbury, NC (P fine denier yarn)

FNT INDUSTRIES INC. Menominee, MI (E monofil)

FOSS MANUFACTURING CO., INC. Haverhill, MA (P staple - captive)

GENERAL FIBERS & FABRICS, INC. La Grange, GA (P film)

GEORGIA SYNTHETICS, INC. Elberton, GA (PP carpet backing, industrial fabrics)

GFF HOLDING COMPANY (formerly N.S.I., INC.) Soperton, GA (P film - captive)

GOLCO Cartersville, GA (P yarn)

UNITED STATES OF AMERICA (continued)

HERCULES INCORPORATED, ABSORBENT AND TEXTILE PRODUCTS GROUP Oxford, GA *Elustra, Herculon, Nouvelle* (P yarn & staple)

THE HOOVEN & ALLISON COMPANY Xenia, OH (P film)

INTERLOOM LTD. (formerly Concorde Fibers Inc.) Dalton, GA (P yarn)

J & J INDUSTRIES Dalton, GA (P yarn)

JAMES RIVER CORPORATION Milford, NJ, Simpsonville, SC and Washougal WA *Celestra, Fibretex* (P spunbonded)

JOHNSON FILAMENTS Williston, VT (P monofil)

KETEMA INC., SPECIAL FILAMENTS DIVISION Odenton, Md (E & P monofil)

KIMBERLY-CLARK CORPORATION Corinth, MS, Balfour, NC, La Grange, GA & Neenah, WI *Accord, Duraguard, Evolution* (P spunbonded); *Cyclean, Evolution III* (P spunbonded/meltblown laminate)

LAMBETH CORPORATION New Bedford, MA *Lambeth* (E & P monofil)

LAWRENCE HOSE COMPANY Burlington, NC (E monofil - captive)

LORETEX CORPORATION Guilderland Center, NY (E film-captive)

MIRAFI INC (subsidiary of Dominion Textiles) Moultrie, GA (P film - captive)

ORIAN Anderson, SC (P yarn)

THE OSTERNECK COMPANY Lumberton, NC (P film)

PHILLIPS FIBERS CORPORATION (subsidiary of Phillips 66 Company) Rocky Mount, NC, Seneca & Spartanburg, SC, *Alpha, Marvess* (P yarn, staple & tow)

POLI-TWINE WESTERN INC. Clearfield, UT (P monofil, P film, rope & cordage)

POLYLOOM CORPORATION OF AMERICA Dayton, TN *Polyloom* (P split film)

PRINCETON (CARPET IND. OF N.A.) Adairsville, GA (P yarn)

REEMAY, INC. Old Hickory, TN *Typar, Typelle, Takton, Biobarrier* (P spunbonded)

SARLON INDUSTRIES, INC. Miami, FL (P monofil & film)

SHAKESPEARE MONOFILAMENT DIVISION Columbia, SC (P monofil)

SHAW INDUSTRIES (formerly Armstrong World Industries, Inc.) Charlotte, NC (P film- captive)

SHENANDOAH FIBERS, INC. Front Royal, VA* (P staple)

UNITED STATES OF AMERICA (continued)

SHUFORD MILLS, INC. Hickory, NC (P film cordage & twine)

SOLUTION FIBERS INC. Lafayette, GA *Better Body, Luxene* (P yarn)

SOUTHERN WEAVING, INC. Greenville, SC (P yarn)

STEVENS FIBER DIVISION, STEVENS LINEN ASSOC., INC. Dudley, MA (P staple)

SUNSHINE ROPE MANUFACTURING INC. Miami, FL (E & P monofil, cordage)

SYNTHETIC INDUSTRIES Chickamauga & Dalton, GA (P film, yarn & staple)

SYNTHETIC INDUSTRIES, FIBRON DIVISION Chattanooga TN *Fibri-Cord, Fibri-Knit, Fibrilawn, Fibrilon* (P film)

TECHLON FIBERS CORPORATION Dalton, GA (P yarn)

TECHNOTRADE Dalton, GA (P yarn)

TOLARAM FIBERS, INC. Ansonville, NC (P yarn)

TWINE PRODUCTS CORPORATION New Orleans, LA (P film)

UNITED STATES ROPE COMPANY Menlo Park, CA (P monofil)

WALL INDUSTRIES, INC. Granite Quarry, NC (E & P monofil, rope & cordage)

WALTRICH PLASTIC CORPORATION Walthourville, GA (P monofil)

WAYN-TEX, INC. Waynesboro, VA *Beamette, Wayntuf* (E & P monofil & P film - captive, spunbonded)

WELLINGTON PURITAN MILLS (MONTAIR DIV.) Pilot Mountain, NC *Pur-Ty, Welltite* (P yarn & E & P monofil & film)

WELLINGTON SYNTHETIC FIBRES, INC. Leesville & Summerville, SC (P yarn & monofil)

TEXTILE PRODUCTS FROM OLEFIN

CONTINENTAL (P yarn)

CONWED CORP. Conwed Plastic Netting (P embossed film for netting)

DICEY (P yarn)

E.I. DU PONT DE NEMOURS & COMPANY (INC.) (E & P embossed film for netting)

HERCULES INCORPORATED, POLYMERS DIVISION *Delnet* (E embossed film for netting)

NALLE, INC. (P embossed film for netting)

RIEGEL PRODUCTS CORPORATION *Polyweb* (P meltblown)

THE 3M COMPANY (P spunbonded)

UNITED STATES OF AMERICA (continued)

GLASS FIBER

CERTAINTEED CORPORATION, FIBER GLASS REINFORCEMENTS DIVISION Wichita Falls, TX *RO99, SatinGlass, Stitchmat, Unifilo* (roving, woven roving, mat, chopped strand & combination product)

FIBER GLASS INDUSTRIES, INC. Amsterdam, NY (roving & chopped, woven, mats)

GAF BUILDING MATERIALS CORPORATION Irwindale, CA (chopped), Nashville, TN (chopped)

GFT, INC. (GLASS FIBER TECHNOLOGY) Chester, SC (wet chop for shingles)

LUNDY TECHNICAL CENTER Pompano Beach, FL *RoMHOglas* (metallized glass fiber roving & strand and nonwoven metallized glass mat)

MANVILLE SALES CORPORATION, MATS, FIBER & REINFORCEMENTS DIVISION Waterville, OH; Etowah, TN & Ennis, TX *Chop-Pak, Dura-Glass, Star Stran, Star Rov, Tempstran, Star Tex* (mat, chopped strands, sliver, rovings & microfibers)

NICOFIBERS CO. Shawnee, OH *Conformat, Surmat* (mat, yarn & strand)

NITTOBO-SCHWEBEL CORPORATION* (yarn)

OWENS-CORNING FIBERGLAS CORPORATION Huntingdon, PA; Aiken & Anderson, SC and Amarillo, TX *Araton, Beta, Bi-Ply, Creel-Pak, ECRGLAS Type 30, Fiberglas, S-Glass, S-2 Glass* (yarn, roving, woven roving, mat, chopped & milled)

PPG INDUSTRIES, INC. FIBER GLASS Lexington & Shelby, NC (yarn, roving, woven roving, mat, chopped & milled, and rubber reinforcement)

SUPERIOR GLASS FIBERS, INC. Bremen, OH (mat)

URUGUAY

HILADOS SINTETICOS S.A. (HISISA)

Nylon 66	Estacion Manga, Montevideo *Hisilon* (yarn)

POLIMEROS URUGUAYOS S.A.

Polyester	San José, San José (staple)

SINTETICOS SLOWAK S.A.

Nylon 6	Montevideo *Crofil* (yarn & monofil)
Nylon 66	Montevideo *Hisilon* (yarn)
Polyester	Montevideo *Terpol* (yarn)

SUDAMTEX del URUGUAY S.A.

Acetate	Colonia (yarn)

OLEFIN FIBER

ARYN S.A. Montevideo (E monofil)

CINCA S.A. Montevideo (E film)

ELABORADORA DE ARPILLERA SINTETICA S.A. (E film)

VENEZUELA

C.A. INVERSIONES ARAGUA

Nylon 6	Maracay *Sudalon* (yarn)

GOMELAST, C.A.

Spandex	Caracas *Spandaven* (yarn)

HILADOS FLEXILON

Nylon 6	Caracas (yarn)
Polyester	Caracas (yarn)

MANTEX, C.A.

Acetate	Valencia (yarn)
Polyester	Maracay, Valencia *Fortrel* (yarn & staple)

SUDAMTEX DE VENZUELA, C.A.

Polyester	Maracay (yarn & staple)

YUGOSLAVIA

HEMTEKS

Polyester	Skopje, Macedonia *Maklen* (yarn & staple)

INCEL FABRIKA CELULOZE I VISKOZE

Polyester	Banja Luka, Bosna i Hercegovina *Belira* (yarn)
Rayon	Banja Luka (staple)

INDUSTRIJA SINTETICKIK VLAKANA (PROGRES)

Nylon 6	Prizren, Kosovo Mitohijan *Supralon* (yarn)
Polyester	Istok, Kosovo Mitohijan & Prizren *Prizrenit* (yarn)

KEMICNA TOVARNA MOSTE

Nylon 6	Ljubljana, Slovenia *Yulon* (yarn)

ORGANSKO HEMIJSKA INDUSTRIJA SKOPJE (OHIS)

Acrylic	Skopje, Macedonia *Makrolan, Malon* (staple)

TEKSTILNA INDUSTRIYA "ZELE VELJKOVIC"

Nylon 6	Leskovac* (yarn & staple)

VARAZDINSKI TEKSTILNI KOMBINAT (VARTEKS)

Polyester	Varazdin (staple)

VISKOZA

Rayon	Loznica, Serbia (ind & reg yarn & staple)

OLEFIN FIBER

HEMIJASKA INDUSTRIJA U OSNIVANJU Belgrade (P staple)

GLASS FIBER

GOSTIVAR STAKLARA Staklara (roving & mat)

WORLDWIDE MANUFACTURED FIBER PRODUCER AFFILIATIONS & PERCENTAGE OF CAPITAL OWNERSHIP

Licensing and royalty agreements are not taken into account. The ownership of companies, other than manufactured fiber producers, is not listed; e.g., weaving mills, chemical producers, etc.

For each country, the percentage following the first-named producer is the portion owned by the captioned company; the remainder of the entry shows other ownership. For example, Akzo N.V. owns 40% of Fibras Quimicas and Alfa-Group owns 60%.

AKZO N.V. (NETHERLANDS)

Brazil	Companhia Bahiana de Fibras 82%; others 18% Polyenka 51%; others 49%
Colombia	Enka de Colombia 49%; others 51%
Ecuador	Enkador 49%; others 51%
Germany, Fed. Rep.	Enka 97%; public 3%
India	Century Enka 40%; others 60%
Mexico	Fibras Quimicas 40%; Alfa-Group 60%
Netherlands	Enka 100% Silenka 33.33%; PPG Industries 33.33%; others 33.33%
Spain	La Seda 58%; others 42%

AMERICAN CYANAMID COMPANY (U.S.A.)

U.S.A.	Fibers Division 100%

AMOCO CHEMICALS CORPORATION (U.S.A.)

Australia	Amoco Chemicals Pty. Ltd. 100%
Brazil	Propex do Brasil Produtos Sineticos Ltda. 100%
Canada	Amoco Fabrics & Fibers Ltd. 100%
Germany, Fed. Rep.	Amoco Deutschland G.m.b.H. 100%
U.K.	Amoco Fabrics (U.K.) Ltd. 100%
U.S.A.	Amoco Fabrics & Fibers Co. 100%

ASAHI CHEMICAL INDUSTRY CO. LTD. (JAPAN)

India	Baroda Rayon Corp. 1%; local interests 89%; others 10%
Indonesia	P.T. Indonesia Asahi Chemical 51%; others 19%; local interests 30%
Ireland	Asahi Synthetic Fibres (Ireland) 85%; others 15%
Japan	Asahi Chemical 100%
Korea, Rep. of	Tong Yang Polyester 50%; Tong Yang Nylon 50%

BASF CORPORATION

BASF Corporation Fibers Division is a division of BASF Corporation.

BASF Fibres Inc. is a subsidiary of BASF Corporation and is owned 100% by BASF Corporation.

BAYER A.G. (WEST GERMANY)

Belgium	Bayer Antwerpen N.V. 100%
Germany, Fed. Rep.	Bayer A.G. 100% Faserwerke Lingen G.m.b.H. 100%
Peru	Bayer Industrial S.A. 60%

COURTAULDS, PLC (U.K.)

France	Courtaulds Fibres S.A. 100%
Italy	Novaceta S.p.A. 50%; SNIA 50%
Spain	Courtaulds Espans S.A. 100% INACSA 12%; public 88%
U.K.	Courtaulds Fibres Ltd. 100%
U.S.A./Canada	Courtaulds Fibers Inc. 100%

E. I. DU PONT DE NEMOURS & COMPANY (U.S.A.)

Argentina	Ducilo 82%; Bunge & Born 18%
Brazil	Du Pont do Brasil 100%
Canada	Du Pont Canada 75%; public 25%
Germany, Fed. Rep.	Du Pont de Nemours (Deutschland) 100%
Japan	Toray-Dupont 50%; Toray Industries 50%
Luxembourg	Du Pont Fibres 100%
Mexico	Nylon de Mexico 40%; Alfa-Group 51%; public 9%
Netherlands	Du Pont de Nemours (Nederland) 100%
U.K.	Du Pont (U.K.) 100%
U.S.A.	Fibers Department 100% Polymer Products Department 100%

ENICHEM FIBRE S.p.A. (ITALY)

Italy	Carpol S.p.A. 100% Terbond S.p.A. 100% Alcantara S.p.A. 51%; Toray (J) 49%

FIRESTONE TIRE & RUBBER COMPANY (U.S.A.)

Canada	Firestone Textiles Co. 100%
U.S.A.	Firestone Fibers & Textiles 100%

HERCULES INCORPORATED (U.S.A.)

Italy	Moplefan 50%; Montedison 50%
U.S.A.	Hercules 100%

HOECHST A.G. (WEST GERMANY)

Austria	Austria Faserwerke; Hoechst Austria 51%; Lenzing 49%
Belgium	Hoechst Celanese 100%
Brazil	Hoechst Do Brasil Quimica e Farmaceutica S.A. 100%
Canada	Celanese Canada Inc. 56%; public 44%
Germany, Fed. Rep.	Hoechst A.G. 100% Zehlendorf 97%; others 3%
Mexico	Celanese Mexicana, S.A. 40%; public 60%
Portugal	Finicisa, Fibras Sinteticos S.A. 100% Hoechst Portuguesa S.A.R.L. 100%
South Africa	Hoechst South Africa 100%
U.K.	Hoechst Fibre Industries 100%
U.S.A.	Hoechst Celanese Corporation 100%

IMPERIAL CHEMICAL INDUSTRIES LIMITED (U.K.)

Germany, Fed. Rep.	ICI Europa Fibres G.m.b.H. 100%
India	Chemicals & Fibres of India Ltd. 55%
Pakistan	ICI Pakistan Manufacturers 70%
South Africa	S.A. Nylon Spinners (through AECI Ltd.) 38%
Spain	Nurel S.A. 100%
U.K.	ICI Fibres 100%

KURARAY CO., LTD. (JAPAN)

Japan	Kuraray 100%

MITSUBISHI RAYON (JAPAN)

Japan	Mitsubishi Rayon Co. Ltd. 100%
Portugal	FISIPE 8%; Mitsubishi Corp. 13%; Quimigal 64%, others 15%
Taiwan	Tong Hwa 19%; Mitsubishi Corp. 12%; others 69%

MONTEFIBRE S.p.A. (ITALY)

Italy	Industrie Tessili Vercelli S.p.A. 100%
Spain	Montefibre Hispania S.A. 100%

OWENS-CORNING FIBERGLAS CORPORATION (U.S.A.)

Belgium	Owens-Corning Fiberglas Europe 100%
Brazil	Fiberglas Fibras 100%
Canada	Fiberglas Canada 100%
France	Owens-Corning Fiberglas Europe 100%
Japan	Asahi Fiber Glass 28%; Asahi Glass Co., Ltd. 72%
Mexico	Vitro-Fibras 40%; Vitro Group 60%
Netherlands	Owens-Corning Fiberglas Netherlands 100%
Norway	Owens-Corning Fiberglas Europe 70%, Elkem-Spigerverket 30%
Spain	Owens-Corning Fiberglas Europe 100%
Sweden	Owens-Corning Fiberglas Europe 100%
U.S.A.	Owens-Corning Fiberglas 100%

PPG INDUSTRIES (U.S.A.)

Netherlands	Silenka 33.33%; Akzo N.V. 33.33%; NOM 33.33%
U.K.	PPG Glass Fibres Ltd. 100%
U.S.A.	Fiber Glass Products 100%
Venezuela	VFG Sudamtex 49%; Sudamtex 51%

PILKINGTON BROTHERS (U.K.)

Argentina	VASA 99.7%; Glaverbel/Boussois/local interests 0.3%
India	Fibreglass Pilkington 50%, plus 1 share; Indian interests 50%, less 1 share
South Africa	Fibreglass South Africa 24.5%; Owens-Corning Fiberglas (U.S.A.) 24.5%; Plate Glass & Shatterprufe Industries Ltd. 51%
U.K.	Fibreglass PLC 100%

RHÔNE-POULENC S.A. (FRANCE)

Argentina	Rhône-Poulenc Argentina S.A. 100%
Brazil	Rhodia S.A. 100%
France	Rhône-Poulenc-Fibres 100%; Cellatex 100%; Rhovyl 100%
Germany, Fed. Rep.	Rhodia A.G. 100%
Spain	Rhône-Poulenc Fibras S.A. 100%
Switzerland	Viscosuisse S.A. 100%

SAINT-GOBAIN (FRANCE)

France	Saint-Gobain Industries 100%
Germany, Fed. Rep.	Gevetex-Textilglas 100%
Italy	Vetrotex Italia 100%
Spain	Cristaleria Espanola S.A. 69%
U.S.A.	CertainTeed Corp. 55%; others 45%

SNIA FIBRE (ITALY)

France	Ets. Nysam 100%
Italy	Novaceta 50%; Courtaulds (U.K.) 50% Nuova Raion Italia S.p.A. 41.2%; others 58.8%

SYNTHETIC INDUSTRIES, INC.

Ireland	Synthetic Industries (Ireland) Ltd. 100%
U.K.	Synthetic Industries Ltd. 100%
U.S.A.	Synthetic Industries, Inc. 100% Fibron Company 100%

TEIJIN LTD. (JAPAN)

Indonesia	P.T. Tifico 65.8%; Toyo Menka 16.5%; local interests 17.7%
Japan	Teijin 100% Teijin Acetate 100%
Korea, Rep. of	Sunkyung Fibres 2.9%; local interests 97.1%
Thailand	Teijin Polyester 45%; local interests 55%

TORAY INDUSTRIES, INC. (JAPAN)

Indonesia	P.T. Indonesia Toray Synthetics 59%; others 41%
Japan	Toray Industries 100%; Toray-Monofilament 100%; Toray-DuPont 50%, DuPont 50%
Korea, Rep. of	Cheil Synthetic Textiles 22.8%; others 77.2% Kolon Industries 19.3%; others 80.7%
Malaysia	Penfibre SDN. Berhad 100%
Thailand	Toray Nylon Thai 30%; others 70%

WELLMAN, INC. (U.S.A.)

Ireland	Wellman International 100%
U.S.A.	Man-Made Fiber Division 100% Fiber Industries, Inc. 100%

TABLE 10:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN

THOUSAND POUNDS

	1990												YEAR TO DATE	
ITEMS & COUNTRY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3	1	89									160	7
BRAZIL	26	53	53	74									206	270
CANADA	628	303	171	405									1507	2670
CHILE	0	309	66	44									419	110
GERMANY, FED. REP. OF	422	516	844	684									2466	2497
IRELAND	145	0	36	35									216	211
JAPAN	104	72	111	104									391	486
KOREA, REP. OF	0	22	33	22									77	144
MEXICO	102	4	121	78									305	471
NETHERLANDS	282	264	345	178									1069	734
UNITED KINGDOM	34	22	60	0									116	415
ALL OTHER COUNTRIES [a]	21	56	22	49									148	127
TOTAL ARTIFICIAL YARN	**1831**	**1624**	**1863**	**1762**									**7080**	**8142**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493	108	1254									2174	1348
CANADA	4973	3854	4391	4333									17551	14302
CHINA, PRC	0	0	0	0									0	473
GERMANY, DEM. REP.	0	0	0	0									0	138
GERMANY, FED. REP. OF	89	134	257	322									802	346
JAPAN	143	204	126	131									604	1356
SWITZERLAND	0	27	0	14									41	112
TAIWAN	354	988	1323	964									3629	144
UNITED KINGDOM	89	93	73	37									292	538
ALL OTHER COUNTRIES [b]	337	301	183	136									957	775
TOTAL ARTIFICIAL STAPLE+TOW	**6304**	**6094**	**6461**	**7191**									**26050**	**19532**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0	43	34									77	76
BELGIUM	776	122	589	594									2081	342
BRAZIL	70	71	57	180									378	369
CANADA	3834	2895	4150	3775									14654	11731
COSTA RICA	762	517	497	462									2238	1763
ECUADOR	53	16	67	67									203	261
FRANCE	2007	1305	1065	1378									5755	4569
GERMANY, FED. REP. OF	2096	2021	1480	1546									7143	9590
ISRAEL	0	0	0	0									0	837
ITALY	892	434	593	905									2824	2979
JAPAN	760	658	505	573									2496	2256
KOREA, REP. OF	31	0	90	20									141	147
MEXICO	1393	900	1607	1396									5296	7911
NETHERLANDS	103	305	921	219									1548	863
SINGAPORE	16	16	0	0									32	58
TAIWAN	791	227	114	818									1950	2171
THAILAND	58	93	95	123									369	265
UNITED KINGDOM	1881	1492	2076	1029									6478	5897
ALL OTHER COUNTRIES [c]	413	319	196	121									1049	692
TOTAL SYNTHETIC YARN	**15936**	**11391**	**14145**	**13240**									**54712**	**52780**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53	11	11									75	25
AUSTRALIA	38	120	30	72									260	274
BELGIUM	1	16	0	158									175	262
CANADA	3703	2439	3082	2325									11549	5120
FRANCE	592	297	769	436									2094	1192
GERMANY, FED. REP. OF	1017	1236	1063	1205									4521	6354
INDIA	1731	1055	4215	0									7001	7172
IRELAND	0	26	0	0									26	1413
ITALY	422	318	534	204									1478	1128
JAPAN	1754	1763	2307	1539									7363	8603
KOREA, REP. OF	1786	1273	1778	2043									6880	13782
MEXICO	3590	2041	2015	2355									10001	2857
NETHERLANDS	1	0	57	20									78	314
SPAIN	35	0	0	0									35	225
SWITZERLAND	399	124	87	385									995	611
TAIWAN	888	572	931	1400									3791	1520
TURKEY	112	114	0	0									226	18
UNITED KINGDOM	2249	1868	2834	2159									9110	8372
ALL OTHER COUNTRIES [d]	549	326	137	92									1104	156
TOTAL SYNTHETIC STAPLE+TOW	**18867**	**13641**	**19850**	**14404**									**66762**	**59398**

a. Ecuador 33, India 33, Italy 33, France 16, Uruguay 13, Belgium 12, Thailand 3, Taiwan 2, Hong Kong 1.

b. Poland 384, Sweden 310, Finland 117, Thailand 66, France 59, Netherlands 19, Italy 2.

c. Portugal 387, Spain 194, Paraguay 83, Ireland 82, Turkey 68, Switzerland 52, Hong Kong 38, El Salvador 34, Sweden 34, Morocco 23, Finland 21, Austria 9, Yugoslavia 8, Haiti 6, Honduras 5, Greece 3, Dominican Republic 2.

d. Venezuela 395, Thailand 209, Sweden 180, China, PRC 92, Malaysia 88, Hong Kong 64, Poland 47, Brazil 27, Denmark 2.

TABLE 11:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

	1990												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208	240	163									853	993
TEXTURED	54	8	0	33									95	205
OTHER	1385	1371	1471	1528									5755	6538
MONOFILAMENTS & STRIPS	150	37	152	38									377	406
SUBTOTAL ABOVE	**1831**	**1624**	**1863**	**1762**									**7080**	**8142**
STAPLE	5989	5884	6154	6846									24873	19432
TOW	312	210	307	342									1171	54
TOPS	3	0	0	3									6	46
SUBTOTAL ABOVE	**6304**	**6094**	**6461**	**7191**									**26050**	**19532**
WASTE	**0**	**0**	**0**	**22**									**22**	**400**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856	1437	1000									4728	5214
TEXTURED														
UP TO 450 DENIER	270	333	253	336									1194	1246
OVER 450 DENIER	2936	1350	2132	3039									9457	5087
OTHER	4531	3817	4273	2090									14711	14757
MONOFILAMENTS & STRIPS	216	117	148	191									672	402
SUBTOTAL ABOVE	**9388**	**6473**	**8243**	**6658**									**30762**	**26706**
POLYESTER														
HIGH TENACITY	614	408	506	421									1949	3234
TEXTURED	785	643	626	923									2977	6060
POY	719	119	117	758									1713	1770
OTHER	2038	1457	1459	1683									6637	6092
MONOFILAMENTS & STRIPS	53	0	67	40									160	234
SUBTOTAL ABOVE	**4209**	**2627**	**2775**	**3825**									**13436**	**17390**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408	2224	1880									6963	6346
OTHER	277	223	301	276									1077	1260
MONOFILAMENTS & STRIPS	611	660	602	601									2474	1078
SUBTOTAL ABOVE	**2339**	**2291**	**3127**	**2757**									**10514**	**8684**
STAPLE														
NYLON	4048	3037	4055	3032									14172	7059
POLYESTER	9261	5813	9622	6652									31348	31852
ACRYLIC	1711	1729	2063	1586									7089	6056
POLYPROPYLENE	543	37	160	27									767	647
OTHER	196	190	320	146									852	2603
TOW														
NYLON	409	308	555	385									1657	1431
POLYESTER	15	70	70	2									157	305
ACRYLIC	2512	1973	2649	2252									9386	7381
OTHER	70	5	35	105									215	383
TOPS	102	479	321	217									1119	1681
SUBTOTAL ABOVE	**18867**	**13641**	**19850**	**14404**									**66762**	**59398**
WASTE														
NYLON	2694	2074	1628	1933									8329	7616
POLYESTER	2703	2241	1882	1067									7893	3098
OTHER	444	571	1027	602									2644	2084
TOTAL MANUFACTURED FIBERS ABOVE	**48779**	**37636**	**46856**	**40221**									**173492**	**153050**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59	54	62									290	385
SPUN YARN	427	503	318	594									1842	1545
SPUN YARNS														
SYNTHETIC	2420	2155	2639	1902									9116	18619
ARTIFICIAL	0	0	0	0									0	0
PUT UP FOR RETAIL SALE	32	24	70	34									160	185
GRAND TOTAL ABOVE	**51773**	**40377**	**49937**	**42813**									**184900**	**173784**

SOURCE: U.S. Census Bureau Report IM145X.

TABLE 12:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37	44	6									179	93
TEXTURED	217	9	30	284									540	510
OTHER	66	106	57	64									293	835
MONOFILAMENTS & STRIPS	97	0	15	11									123	190
SUBTOTAL ABOVE	**472**	**152**	**146**	**365**									**1135**	**1628**
STAPLE	1195	2051	1838	1329									6413	6858
TOPS	333	0	203	187									723	231
SUBTOTAL ABOVE	**1528**	**2051**	**2041**	**1516**									**7136**	**7089**
WASTE	**330**	**407**	**614**	**547**									**1898**	**4565**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357	9332	8892									33338	43239
TEXTURED														
UP TO 450 DENIER	1571	588	626	2098									4883	2493
OVER 450 DENIER	5636	4353	5225	4130									19344	19646
OTHER	2637	2264	3143	2401									10445	8462
MONOFILAMENTS & STRIPS	8	32	93	33									166	815
SUBTOTAL ABOVE	**17609**	**14594**	**18419**	**17554**									**68176**	**74655**
POLYESTER														
HIGH TENACITY	4308	5166	5459	4737									19670	12208
TEXTURED	3074	3021	4078	3508									13681	12652
POY	1831	2368	1287	1783									7269	5839
OTHER	1297	1748	1824	1275									6142	3403
MONOFILAMENTS & STRIPS	185	285	91	93									654	756
SUBTOTAL ABOVE	**10695**	**12586**	**12739**	**11396**									**47416**	**34858**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523	549	801									2408	3265
OTHER	2035	2007	2279	2972									9293	6278
MONOFILAMENTS & STRIPS	876	913	1664	1218									4671	2995
SUBTOTAL ABOVE	**3446**	**3443**	**4492**	**4991**									**16372**	**12538**
STAPLE														
NYLON	3163	2765	2343	3257									11528	11761
POLYESTER	7157	6405	9490	7701									30753	50673
ACRYLIC	4584	3178	3882	3936									15580	22539
POLYPROPYLENE	2038	1561	2666	3226									9491	6298
OTHER	2688	923	1504	961									6076	6923
TOW														
NYLON	121	176	155	304									756	239
POLYESTER	18	64	0	100									182	1707
ACRYLIC	1710	1787	989	956									5442	8285
OTHER	26	12	15	243									296	714
TOPS	3984	2729	2309	4760									13782	5226
SUBTOTAL ABOVE	**25489**	**19600**	**23353**	**25444**									**93886**	**114365**
WASTE														
NYLON	4117	4250	3894	2746									15007	9287
POLYESTER	3268	2845	2782	3321									12216	17073
OTHER	3343	3700	4979	4352									16374	26881
TOTAL MANUFACTURED FIBERS ABOVE	**70297**	**63628**	**73459**	**72232**									**279616**	**302939**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	28	45	32	25									130	181
SPUN YARN	0	0	0	0									0	0
SPUN YARNS														
SYNTHETIC	3007	4304	3749	4278									15338	11664
ARTIFICIAL	0	0	0	0									0	0
PUT UP FOR RETAIL SALE	287	398	641	746									2072	2849
GRAND TOTAL ABOVE	**73619**	**68375**	**77881**	**77281**									**297156**	**317633**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 13:
FILAMENT YARN DOMESTIC SHIPMENTS[a]

MILLION POUNDS

(C) ARTIFICIAL (CELLULOSIC) YARN (N) NYLON (P) POLYESTER (O) OLEFIN

		ANNUAL DATA				QUARTERLY DATA							
						1989				1990			
ITEM		1986	1987	1988	1989	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
HOSIERY[b]	N	95.1	93.2	100.3	j	j	j	j		j			
OTHER CIRCULAR KNIT[c]	N	21.3	25.3	26.4	139.1	32.5	33.8	34.8	38.0	29.8			
	P	150.3	102.8	119.5	132.4	40.4	33.5	31.1	27.4	22.7			
	C	2.0	1.1	0.6	0.5	0.2	0.1	0.1	0.1	0.2			
FLAT KNIT	C	47.8	27.9	24.3	21.4	6.1	7.5	3.7	4.1	5.1			
	N	133.8	131.4	133.4	125.2	36.0	34.4	29.8	25.0	23.3			
	P	167.1	162.5	162.1	181.0	46.0	47.7	44.5	42.8	38.7			
CARPET FACE	N	881.4	916.0	938.3	932.3	225.0	233.8	243.7	229.8	239.6			
	O	215.7	244.5	266.6	249.9	69.0	63.3	60.2	57.4	83.5			
CARPET BACKING[d]	O	404.1	425.3	427.0	463.4	105.4	123.4	120.6	114.0	108.7			
OTHER BROAD WOVEN[e]	C	126.3	122.8	141.9	149.4	35.6	38.5	37.8	37.5	33.8			
	N	76.2	79.4	78.3	88.8	21.1	22.6	21.9	23.2	24.9			
	P	344.4	379.4	391.3	366.3	100.7	106.1	80.7	78.8	84.3			
	O	271.5	317.7	337.3	337.5	88.8	84.3	83.6	80.8	90.7			
NARROW WOVEN[f]	C	2.0	2.2	4.4	4.4	1.7	0.8	1.0	0.9	0.8			
	N	33.9	42.1	42.0	36.9	9.5	10.2	8.4	8.8	8.2			
	P	44.0	66.2	81.0	76.4	18.8	23.2	20.0	14.4	16.6			
	O	17.5	17.7	19.0	19.8	4.8	4.7	5.2	5.1	5.1			
TIRES, INCL. CHAFER[g]	N	134.2	143.0	132.2	135.7	34.3	33.6	32.6	35.2	31.0			
	P	159.3	162.8	171.8	169.3	41.7	43.6	42.3	41.7	40.9			
OTHER RUBBER INDUSTRY[c,g]	N	15.2	16.4	20.4	18.1	4.5	4.4	5.0	4.2	5.0			
	P	27.2	34.5	25.2	32.7	6.3	8.2	8.9	9.3	8.6			
ROPE, CORDAGE & FISHLINE	N	36.4	37.9	36.4	34.2	8.8	9.2	7.9	8.3	9.5			
	P	13.0	13.4	12.5	14.4	3.2	3.8	3.5	3.9	4.0			
	O	106.3	106.7	120.3	125.6	33.5	30.4	24.9	36.8	28.6			
ALL OTHER[h]	C	14.0	12.8	11.4	11.6	2.4	3.4	3.0	2.8	0.2			
	N	52.1	69.6	64.7	65.0	16.2	17.7	16.8	14.3	11.2			
	P	187.1	191.8	194.0	138.2	34.9	37.5	33.1	32.7	25.9			
	O	34.1	23.6	29.6	29.8	6.5	9.4	7.1	6.8	11.2			
TOTAL ABOVE	C	**192.1**	**166.8**	**182.6**	**187.3**	**46.0**	**50.3**	**45.6**	**45.4**	**40.1**			
	N	**1479.6**	**1554.3**	**1572.4**	**1575.3**	**387.9**	**399.7**	**400.9**	**386.8**	**382.5**			
	P	**1092.4**	**1113.4**	**1157.4**	**1110.7**	**292.0**	**303.6**	**264.1**	**251.0**	**241.7**			
	O	**1049.2**	**1135.5**	**1199.8**	**1226.0**	**308.0**	**315.5**	**301.6**	**300.9**	**327.8**			
TOTAL DOMESTIC		**3813.3**	**3970.0**	**4112.2**	**4099.3**	**1033.9**	**1069.1**	**1012.2**	**984.1**	**992.1**			
ALSO DIVIDED AS													
APPAREL		*962.4*	*930.2*	*941.2*	*924.7*	*253.4*	*253.3*	*217.1*	*200.9*	*192.5*			
HOME FURNISHINGS		*1738.0*	*1838.4*	*1902.6*	*1927.2*	*468.6*	*498.1*	*489.9*	*470.6*	*501.8*			
INDUSTRIAL		*1112.9*	*1201.4*	*1268.4*	*1247.4*	*311.9*	*317.7*	*305.2*	*312.6*	*297.8*			
SHIPMENTS OF FEED & PRODUCER-TEXTURED YARN (NONCARPET)[i]													
NYLON		115.8	NA	NA	NA	NA	NA	NA	NA	NA			
POLYESTER		634.6	626.3	649.9	597.3	164.5	164.0	138.7	130.1	123.2			
OLEFIN		22.9	26.6	24.4	26.0	6.9	4.5	8.0	6.6	7.4			

NA No longer available.

a. Filament yarn plus monofilament shipments by primary trade or end use; olefin includes spunbonded polypropylene but does not include spunbonded polyethylene.

b. Small quantities of polyester and artificial (cellulosic) yarn are included in All Other.

c. Small quantities of olefin are included in All Other.

d. Small quantities of nylon and polyester are included in All Other.

e. Other Broad Woven except carpets, tire fabric, flat belting, etc.

f. Narrow Woven includes apparel ribbons and braids, auto seat belts and/or furniture webbing.

g. Artificial (cellulosic) yarn quantities included in All Other.

h. All Other includes sewing thread and other industrial applications. The olefin quantities include sliver knit backing. Also includes indirect exports.

i. These quantities are included in the Total Domestic area above.

j. Nylon quantities are included in Other Circular Knit.

TABLE 14:
STAPLE+TOW DOMESTIC SHIPMENTS

MILLION POUNDS

ITEM		ANNUAL DATA				QUARTERLY DATA							
						1989				1990			
ITEM		1986	1987	1988	1989	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
(R) RAYON[h] *(N) NYLON* *(A) ACRYLIC+MODACRYLIC* *(P) POLYESTER* *(O) OLEFIN*													
HOSIERY, SWEATERS & CRAFT YARNS[a]	A	228.8	192.4	183.2	174.5	48.4	47.3	41.5	37.3	41.0			
	NPR	5.0	3.5	2.7	2.1	0.6	0.4	0.5	0.6	0.6			
PILE FABRICS[b]	A	23.2	20.8	21.3	20.0	5.1	6.0	5.0	3.9	4.2			
	P	15.0	19.7	14.7	15.3	3.7	4.0	4.1	3.5	3.5			
OTHER CIRCULAR KNIT + FLAT KNIT[c]	R	4.7	3.7	2.5	NA	NA	NA	NA	NA	NA			
	A	196.3	185.1	139.0	132.4	35.7	34.9	36.4	25.4	32.5			
	P	367.8	453.3	470.0	519.5	127.8	131.4	132.0	128.3	123.4			
BLANKETS[b]	A	26.7	25.7	25.1	29.8	7.4	9.3	8.0	5.1	i			
	P	3.7	9.2	6.9	9.2	2.3	2.9	2.4	1.6	2.0			
OTHER BROAD WOVEN	R	218.0	230.7	243.0	NA	NA	NA	NA	NA	NA			
	N	37.0	38.7	35.2	32.7	8.1	7.8	8.7	8.1	6.2			
	A	35.3	41.7	39.3	40.5	12.6	11.5	7.9	8.5	13.1			
	P	885.6	839.2	863.5	821.8	200.8	226.4	197.6	197.0	170.9			
	O	18.0	20.2	17.1	33.4	5.2	9.0	9.1	10.1	10.4			
CARPET FACE YARNS[f]	R	0.4	+	0.4	NA	NA	NA	NA	NA	NA			
	N	837.8	905.1	887.7	894.9	226.3	217.3	230.3	221.0	230.2			
	P	145.0	209.0	261.2	211.6	60.1	51.3	48.6	51.6	48.0			
	O	117.2	116.2	138.2	137.7	38.5	35.1	32.9	31.2	34.2			
FIBERFILL[d]	P	294.9	348.6	357.2	349.5	90.4	93.6	79.2	86.3	75.6			
FLOCK	NP	5.9	5.5	6.9	7.5	1.8	1.7	1.7	2.3	1.9			
	R	1.8	0.9	0.1	NA	NA	NA	NA	NA	NA			
NONWOVENS[e]	R	125.4	124.4	122.3	NA	NA	NA	NA	NA	NA			
	N	2.1	1.9	2.1	2.4	0.7	0.6	0.6	0.5	0.6			
	P	175.4	204.2	244.1	271.5	68.0	71.7	65.8	66.0	63.5			
	[g] VINYON+O	166.2	198.0	180.9	183.0	46.1	46.7	46.8	43.4	47.0			
ALL OTHER	R	20.8	22.7	17.2	NA	NA	NA	NA	NA	NA			
	N	11.9	14.8	13.7	17.8	5.3	3.8	4.3	4.4	3.9			
	A	20.9	13.6	13.2	17.4	3.7	3.4	4.0	6.3	8.0			
	P	108.3	115.0	91.3	61.0	21.5	12.9	13.0	13.6	14.8			
	[g] VINYON+O	11.3	6.7	8.0	9.3	1.8	2.7	2.6	2.2	2.4			
TOTAL ABOVE	R	**373.0**	**383.1**	**386.0**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**			
	N	**894.9**	**966.0**	**944.9**	**955.3**	**242.0**	**231.2**	**245.8**	**236.3**	**242.6**			
	A	**531.2**	**479.3**	**421.1**	**414.8**	**112.9**	**112.4**	**102.8**	**86.7**	**98.8**			
	P	**1998.6**	**2201.0**	**2311.8**	**2261.3**	**575.4**	**594.6**	**543.0**	**548.3**	**502.5**			
	[g] VINYON+O	**312.7**	**341.1**	**344.2**	**363.4**	**91.6**	**93.5**	**91.4**	**86.9**	**94.0**			
TOTAL DOMESTIC		**4110.4**	**4370.5**	**4408.0**	**3994.8**	**1021.9**	**1031.7**	**983.0**	**958.2**	**937.9**			
ALSO DIVIDED AS													
APPAREL		*1489.3*	*1479.9*	*1421.6*	*1266.8*	*323.3*	*347.1*	*313.4*	*283.0*	*278.8*			
HOME FURNISHINGS		*1625.8*	*1755.8*	*1827.5*	*1695.7*	*439.0*	*418.4*	*421.2*	*417.1*	*415.4*			
INDUSTRIAL		*995.3*	*1134.8*	*1158.9*	*1032.3*	*259.6*	*266.2*	*248.4*	*258.1*	*243.7*			

NA No longer available.

a. Olefin quantities are included in All Other

b. Rayon and nylon quantities are included in All Other

c. Nylon quantities are included in All Other

d. Rayon, acrylic and nylon quantities are included in All Other

e. Wet & dry laid and needled batts only.

f Acrylic and nylon quantities are included in All Other.

g. 1987 - 1990 data exclude Vinyon.

h. Rayon staple+tow data no longer available in 1989 - 1990.

i. Acrylic quantites are included in All Other.

TABLE 15:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

ITEM	1990												YEAR TO DATE[a]	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b,c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4	18.1	17.4								83.4	92.7
RAYON STAPLE	30.1	25.3	26.3	28.2	25.1								135.0	169.3
TOTAL ARTIFICIAL (CELLULOSIC)	**45.2**	**40.7**	**43.7**	**46.3**	**42.5**								**218.4**	**262.0**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4	28.4	28.8								140.8	155.6
- CARPET	86.5	81.1	82.2	85.6	80.1								415.5	397.7
- TEXTILE[f]	28.9	28.2	29.9	32.0	32.0								151.0	170.5
POLYESTER - INDUSTRIAL[d]	27.2	28.6	31.8	32.5	30.4								150.5	151.8
- TEXTILE[f]	56.6	56.2	58.0	69.8	68.4								309.0	374.0
OLEFIN[e]	104.5	113.9	114.1	119.2	119.9								571.6	529.6
TOTAL YARN	**328.6**	**338.3**	**344.4**	**367.5**	**359.6**								**1738.4**	**1779.2**
STAPLE+TOW+FIBERFILL														
NYLON	88.8	74.9	86.0	85.0	87.0								421.7	407.2
ACRYLIC+MODACRYLIC	40.4	39.7	43.2	39.7	43.0								206.0	237.4
POLYESTER	168.9	175.7	173.2	181.9	176.0								875.7	1032.7
OLEFIN	30.3	34.4	35.3	35.2	36.1								171.3	158.4
TOTAL STAPLE	**328.4**	**324.7**	**337.7**	**341.8**	**342.1**								**1674.7**	**1835.7**
TOTAL SYNTHETIC (NONCELLULOSIC)	**657.0**	**663.0**	**682.1**	**709.3**	**701.7**								**3413.1**	**3614.9**
TOTAL MANUFACTURED FIBER	**702.2**	**703.7**	**725.8**	**755.6**	**744.2**								**3631.5**	**3876.9**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8	9.1	7.6								7.6	9.7
RAYON STAPLE	20.2	17.2	14.0	14.2	11.9								11.9	13.4
TOTAL ARTIFICIAL (CELLULOSIC)	**29.9**	**27.1**	**22.8**	**23.3**	**19.5**								**19.5**	**23.1**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4	36.0	30.1								30.1	24.2
- CARPET	60.5	61.2	62.6	63.2	65.4								65.4	64.0
- TEXTILE[f]	57.0	59.9	64.3	63.5	63.5								63.5	47.4
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5	39.2	37.9								37.9	30.9
- TEXTILE[f]	94.5	104.9	109.9	106.4	99.7								99.7	85.0
OLEFIN[e]	68.1	66.6	66.0	63.9	63.9								63.9	58.5
TOTAL YARN	**356.2**	**366.9**	**375.7**	**372.2**	**360.5**								**360.5**	**310.0**
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1	44.3	47.7								47.7	57.5
ACRYLIC+MODACRYLIC	69.5	70.9	72.8	75.3	78.9								78.9	65.2
POLYESTER	193.5	195.1	192.9	217.4	207.6								207.6	176.2
OLEFIN	34.6	33.4	31.5	29.8	28.5								28.5	35.2
TOTAL STAPLE	**337.7**	**339.9**	**334.3**	**366.8**	**362.7**								**362.7**	**334.1**
TOTAL SYNTHETIC (NONCELLULOSIC)	**693.9**	**706.8**	**710.0**	**739.0**	**723.2**								**723.2**	**644.1**
TOTAL MANUFACTURED FIBER	**723.8**	**733.9**	**732.8**	**762.3**	**742.7**								**742.7**	**667.2**
	WOOL & COTTON CONSUMPTION													
APPAREL CLASS WOOL														
CARPET CLASS WOOL														
TOTAL RAW WOOL[g]														
RAW COTTON	317.3	332.1	365.9	330.2									1345.5	1261.8

a. "Year to date" totals for stock, are the latest month's figures.

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

g. **Wool data for 1990 available on a quarterly basis only.**

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- Exports
- Inventories
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- Carpet Yarn
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- Flat Yarn
- Feed & Producer Textured Yarn
- Shipments by Denier
- Indirect Exports

Quarterly

- Production
- Domestic Shipments
- Imports
- Exports
- Shipments by Denier
- Inventories
- Primary End Use
- Secondary End Use
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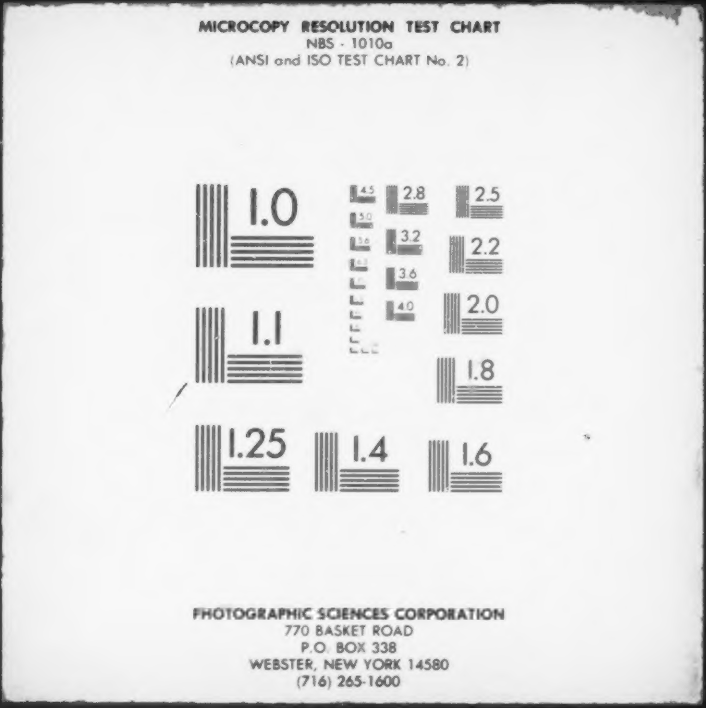
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FIBER ORGANON

Formerly Textile Organon

Volume 61, No. 7 ☐ July 1990

A publication of *Fiber Economics Bureau, Inc.*

Highlights

- Worldwide Manufactured Fiber Survey in millions of pounds.
- Worldwide Fiber Demand rises 2% to reach 84,487 million pounds.
  ...Demand for manufactured fiber up 2% to 38,781 million pounds.
  ...Demand for natural fibers up 2% to 45,706 million pounds.

SHIPMENTS:

In June, total manufactured fiber shipments reached 709 milllion pounds, 5% below the 744 million pounds shipped in May and 5% below the 749 million pounds shipped in June 1989.

June shipments of synthetic (noncellulosic) filament yarn fell 5% to 343 million pounds and staple+tow fell 5% to 326 million pounds.

Contributing to the decrease in shipments over the previous month were nylon staple+tow down 11% or 9 million pounds, polyester textile yarn down 10% or 7 million pounds and rayon staple+tow down 3 million pounds or 10%.

Year-to-date domestic shipments of manufactured fiber are down 6% and exports are down 7%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

ITEM	1990 JUN	1990 MAY	% CHG 6/90-5/90	1989 JUN	% CHG 6/90-6/89	YEAR TO DATE 1990	YEAR TO DATE 1989	% CHG YTD 1990-1989
ARTIFICIAL (CELLULOSIC)								
YARN	16.9	17.4	*-2.9*	18.4	*-8.2*	100.3	111.1	*-9.7*
RAYON STAPLE	22.6	25.1	*-10.0*	30.9	*-26.9*	157.6	200.2	*-21.3*
TOTAL ARTIFICIAL (CELL.)	**39.5**	**42.5**	***-7.1***	**49.3**	***-19.9***	**257.9**	**311.3**	***-17.2***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	27.6	28.8	*-4.2*	32.7	*-15.6*	168.4	188.3	*-10.6*
- CARPET	75.8	80.1	*-5.4*	78.5	*-3.4*	491.3	476.2	*+3.2*
- TEXTILE [a]	31.2	32.0	*-2.5*	34.2	*-8.8*	182.2	204.7	*-11.0*
POLYESTER - INDUSTRIAL	30.2	30.4	*-0.7*	32.8	*-7.9*	180.7	184.6	*-2.1*
- TEXTILE [a]	61.4	68.4	*-10.2*	66.1	*-7.1*	370.4	440.1	*-15.8*
OLEFIN	117.1	119.9	*-2.3*	105.5	*+11.0*	689.0	635.1	*+8.5*
TOTAL YARN	**343.3**	**359.6**	***-4.5***	**349.8**	***-1.9***	**2082.0**	**2129.0**	***-2.2***
STAPLE+TOW+FIBERFILL								
NYLON	77.6	87.0	*-10.8*	78.3	*-0.9*	499.3	485.5	*+2.8*
ACRYLIC+MODACRYLIC	43.8	43.0	*+1.9*	44.0	*-0.5*	249.8	281.4	*-11.2*
POLYESTER	167.7	176.0	*-4.7*	193.9	*-13.5*	1043.4	1226.6	*-14.9*
OLEFIN	37.2	36.1	*+3.0*	33.5	*+11.0*	208.5	191.9	*+8.7*
TOTAL STAPLE	**326.3**	**342.1**	***-4.6***	**349.7**	***-6.7***	**2001.0**	**2185.4**	***-8.4***
TOTAL SYNTHETIC (NONCELL.)	**669.6**	**701.7**	***-4.6***	**699.5**	***-4.3***	**4083.0**	**4314.4**	***-5.4***
TOTAL MANUFACTURED FIBER	**709.1**	**744.2**	***-4.7***	**748.8**	***-5.3***	**4340.9**	**4625.7**	***-6.2***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS [b]	666.4	699.9	*-4.8*	708.7	*-6.0*	4100.6	4366.3	*-6.1*
EXPORTS [c]	42.7	44.3	*-3.6*	40.1	*+6.5*	240.3	259.4	*-7.4*

a. Includes low denier industrial yarn.
b. Includes olefin exports.
c. Excludes olefin exports.

Fiber Organon

A Monthly Review

July 1990

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President & Editor
Rosemarie D. Frick

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Facsimile: (201) 228-7598

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CONTENTS

Features

Worldwide Manufactured Fiber Survey (Million Pounds) **163 - 180**
- Graph 1: Worldwide Demand for Certain Fibers 163
- Worldwide Demand for Certain Fibers 163
- Worldwide Synthetic (Noncellulosic) Fiber Production & Producing Capacity by Country 164 - 167
- Worldwide Artificial (Cellulosic) Fiber Production & Producing Capacity by Country 168 - 171
- Worldwide Rayon vs. Acetate Filament Yarn Production & Producing Capacity by Country 172 - 173
- Worldwide Synthetic (Noncellulosic) Fiber Production & Producing Capacity by Fiber 174 - 175
- Percent Share of Worldwide Artificial (Cellulosic) Fiber Production & Producing Capacity by Area 176
- Percent Share of Worldwide Synthetic (Noncellulosic) Fiber Production & Producing Capacity by Area 176
- Graph 2: Percent Share of Worldwide Artificial (Cellulosic) Fiber Production & Producing Capacity by Area 177
- Graph 3: Percent Share of Worldwide Synthetic (Noncellulosic) Fiber Production & Producing Capacity by Area 178
- Worldwide Glass Fiber Production & Producing Capacity 179
- Estimated Worldwide Cigarette Tow Production 179
- Worldwide Olefin Fiber Production by Country 180

Industry Regulars

Total U.S. Manufactured Fiber Shipments **161**

Monthly U.S. Manufactured Fiber Data **181 - 183**
- Imports by Country of Origin 181
- Imports by Fiber 182
- Exports by Fiber 183

Selected U.S. Monthly Fiber Data **184**

GRAPH 1:
WORLDWIDE DEMAND FOR CERTAIN FIBERS
—SHARE

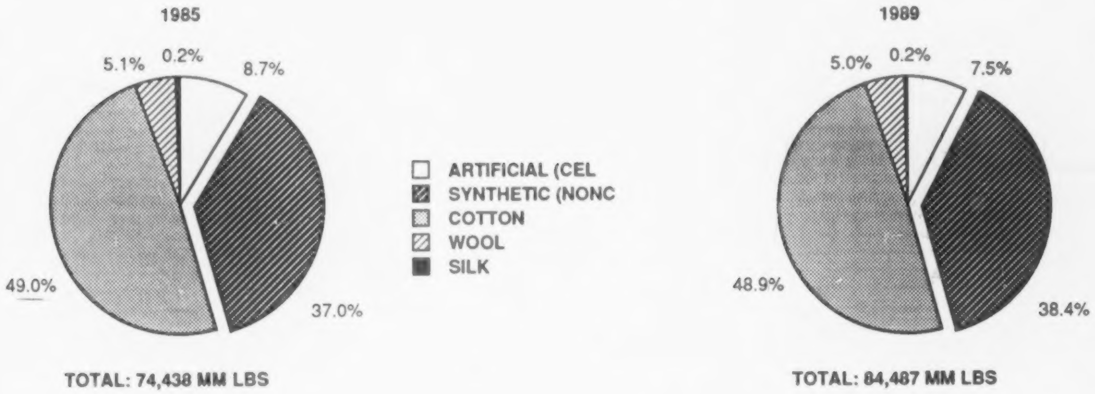


TABLE 2:
WORLDWIDE DEMAND FOR CERTAIN FIBERS
MILLION POUNDS

TYPE OF FIBER	1985	1986	1987	1988	1989	% CHANGE 1989/1988
ARTIFICIAL (CELLULOSIC) FIBERS						
YARN+MONOFILAMENTS	2037	2037	2007	2090	2046	-2.1
STAPLE+TOW	4424	4267	4220	4275	4291	+0.4
TOTAL ARTIFICIAL (CELLULOSIC)	**6461**	**6304**	**6227**	**6365**	**6337**	**-0.4**
SYNTHETIC (NONCELLULOSIC) FIBERS						
YARN+MONOFILAMENTS	12297	12552	13316	14423	14811	+2.7
STAPLE+TOW	15235	15974	16985	17241	17633	+2.3
TOTAL SYNTHETIC (NONCELLULOSIC)	**27532**	**28526**	**30301**	**31664**	**32444**	**+2.5**
TOTAL MANUFACTURED [a]	**33993**	**34830**	**36528**	**38029**	**38781**	**+2.0**
% of World Total	*46%*	*44%*	*45%*	*46%*	*46%*	
NATURAL FIBERS						
RAW COTTON [b]	36519	40300	40219	40750	41299	+1.3
RAW WOOL [c]	3796	3946	4045	4151	4261	+2.6
RAW SILK [d]	130	139	139	141	146	+3.5
TOTAL NATURAL	**40445**	**44385**	**44403**	**45042**	**45706**	**+1.5**
% of World Total	*54%*	*56%*	*55%*	*54%*	*54%*	
WORLD TOTAL	**74438**	**79215**	**80931**	**83071**	**84487**	**+1.7**
World Total %	*100%*	*100%*	*100%*	*100%*	*100%*	

The silk and manufactured fiber data are on a calendar year basis, while the figures for cotton and wool are on a seasonal basis.

- **a.** Manufactured fiber data are from tables 4 and 5. Glass fiber, olefin and acetate cigarette tow production are not included.
- **b.** International Cotton Advisory Committee. ***COTTON: Review of the World Situation***, May - June 1990. New series based on cotton consumption data.
- **c.** Commonwealth Secretariat. Wool Quarterly, No. III, 1989, on a clean wool basis. See also the December 1989 ***Fiber Organon***, page 267.
- **d.** International Silk Association; Food and Agriculture Organization of the United States.

TABLE 3:
WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY EXCEPT OLEFIN
MILLION POUNDS

	ACTUAL PRODUCTION								
	1985			1986			1987		
COUNTRY	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
WESTERN EUROPE									
AUSTRIA	0	39.9	39.9	0	35.1	35.1	0	34.6	34.6
BENELUX[a]	177.5	66.4	243.9	160.9	75.8	236.7	163.1	72.8	235.9
FINLAND	1.1	0	1.1	0.4	0	0.4	0.2	0	0.2
FRANCE	133.8	269.0	402.8	134.9	233.7	368.6	125.2	229.7	354.9
GERMANY, FED. REP.	793.7	886.2	1679.9	771.6	870.8	1642.4	783.3	890.7	1674.0
GREECE	19.8	22.0	41.8	20.7	23.1	43.8	20.7	22.0	42.7
IRELAND	25.4	99.9	125.3	24.3	134.5	158.8	24.3	138.9	163.2
ITALY/MALTA	378.3	864.2	1242.5	385.8	886.0	1271.8	377.0	867.7	1244.7
PORTUGAL	2.2	112.4	114.6	0	121.3	121.3	0	127.4	127.4
SPAIN	187.4	418.7	606.1	187.2	421.7	608.9	177.5	414.5	592.0
SWITZERLAND	161.2	58.6	219.8	147.9	57.3	205.2	146.0	48.7	194.7
TURKEY	114.6	295.4	410.0	132.3	372.6	504.9	152.1	421.1	573.2
UNITED KINGDOM	186.7	348.3	535.0	172.4	286.6	459.0	179.5	268.1	447.6
TOTAL WESTERN EUROPE	**2181.7**	**3481.0**	**5662.7**	**2138.4**	**3518.5**	**5656.9**	**2148.9**	**3536.2**	**5685.1**
EASTERN EUROPE									
ALBANIA	0.9	0	0.9	0.9	0	0.9	1.1	0	1.1
BULGARIA	61.7	94.4	156.1	83.8	105.6	189.4	87.3	107.4	194.7
CZECHOSLOVAKIA	167.5	85.5	253.0	164.7	101.0	265.7	168.9	102.5	271.4
GERMANY, DEM. REP.	143.3	178.1	321.4	169.8	180.3	350.1	160.1	177.9	338.0
HUNGARY	18.5	31.7	50.2	18.5	34.4	52.9	15.0	37.3	52.3
POLAND	190.5	111.6	302.1	188.7	102.7	291.4	193.6	102.7	296.3
ROMANIA	127.9	306.0	433.9	129.6	310.6	440.2	131.2	313.9	445.1
USSR	857.1	714.3	1571.4	892.4	778.2	1670.6	959.0	904.3	1863.3
YUGOSLAVIA	78.3	131.2	209.5	87.5	127.0	214.5	101.4	140.9	242.3
TOTAL EASTERN EUROPE	**1645.7**	**1652.8**	**3298.5**	**1735.9**	**1739.8**	**3475.7**	**1817.6**	**1886.9**	**3704.5**
TOTAL EUROPE	**3827.4**	**5133.8**	**8961.2**	**3874.3**	**5258.3**	**9132.6**	**3966.5**	**5423.1**	**9389.6**

Y Yarn+monofilaments.
S Staple+tow+fiberfill.
a. Includes Belgium, Netherlands and Luxembourg.

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
0	36.8	36.8	0	38.4	38.4	*0*	*48.5*	*48.5*	*0*	*48.5*	*48.5*
169.5	74.1	243.6	176.4	88.2	264.6	*228.2*	*168.7*	*396.9*	*228.2*	*179.7*	*407.9*
0.2	0	0.2	0.4	0	0.4	*1.1*	*0*	*1.1*	*1.1*	*0*	*1.1*
128.7	256.6	385.3	128.7	235.0	363.7	*177.5*	*281.1*	*458.6*	*147.7*	*282.2*	*429.9*
793.4	862.4	1655.8	782.6	925.9	1708.5	*932.5*	*965.6*	*1898.1*	*952.4*	*976.6*	*1929.0*
20.9	20.9	41.8	22.5	17.6	40.1	*37.5*	*26.5*	*64.0*	*37.5*	*26.5*	*64.0*
29.8	144.8	174.6	36.8	161.6	198.4	*30.9*	*180.8*	*211.7*	*39.7*	*180.8*	*220.5*
411.4	832.5	1243.9	429.9	760.6	1190.5	*434.3*	*983.3*	*1417.6*	*429.9*	*1003.1*	*1433.0*
0	119.7	119.7	0	123.0	123.0	*0*	*145.5*	*145.5*	*0*	*145.5*	*145.5*
175.5	409.6	585.1	174.8	387.3	562.1	*262.3*	*489.4*	*751.7*	*262.3*	*487.2*	*749.5*
160.5	60.4	220.9	160.1	50.7	210.8	*187.4*	*72.8*	*260.2*	*176.4*	*72.8*	*249.2*
169.8	401.2	571.0	191.8	432.1	623.9	*366.0*	*531.3*	*897.3*	*381.4*	*553.4*	*934.8*
206.4	220.2	426.6	220.5	187.4	407.9	*238.1*	*352.7*	*590.8*	*220.5*	*374.8*	*595.3*
2266.1	**3439.2**	**5705.3**	**2324.5**	**3407.8**	**5732.3**	***2895.8***	***4246.2***	***7142.0***	***2877.1***	***4331.1***	***7208.2***
1.1	0	1.1	1.1	0	1.1	*4.4*	*0*	*4.4*	*4.4*	*11.0*	*15.4*
90.2	108.5	198.7	90.8	109.3	200.1	*132.3*	*238.1*	*370.4*	*132.3*	*238.1*	*370.4*
179.2	105.8	285.0	167.8	115.3	283.1	*222.4*	*191.8*	*414.2*	*222.4*	*191.8*	*414.2*
172.6	187.8	360.4	167.5	195.3	362.8	*214.5*	*286.6*	*501.1*	*236.6*	*286.6*	*523.2*
18.7	39.9	58.6	14.6	41.9	56.5	*27.6*	*44.1*	*71.7*	*27.6*	*94.8*	*122.4*
197.1	117.5	314.6	176.8	108.9	285.7	*251.8*	*156.5*	*408.3*	*251.8*	*189.6*	*441.4*
131.0	316.6	447.6	131.6	317.7	449.3	*149.9*	*394.6*	*544.5*	*149.9*	*394.6*	*544.5*
1009.0	906.3	1915.3	1032.2	930.3	1962.5	*1190.5*	*1157.4*	*2347.9*	*1254.4*	*1183.9*	*2438.3*
99.6	127.4	227.0	103.8	133.2	237.0	*158.7*	*246.9*	*405.6*	*167.5*	*246.9*	*414.4*
1898.5	**1909.8**	**3808.3**	**1886.2**	**1951.9**	**3838.1**	***2352.1***	***2716.0***	***5068.1***	***2446.9***	***2837.3***	***5284.2***
4164.6	**5349.0**	**9513.6**	**4210.7**	**5359.7**	**9570.4**	***5247.9***	***6962.2***	***12210.1***	***5324.0***	***7168.4***	***12492.4***

TABLE 3:
WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY EXCEPT OLEFIN *(CONTINUED)*

MILLION POUNDS

	ACTUAL PRODUCTION								
	1985			1986			1987		
COUNTRY	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
U.S.A.	**2835.7**	**3478.6**	**6314.3**	**2778.2**	**3656.5**	**6434.7**	**2875.9**	**3945.7**	**6821.6**
CANADA	**165.6**	**127.9**	**293.5**	**166.0**	**141.8**	**307.8**	**157.6**	**128.3**	**285.9**
OTHER AMERICAS									
ARGENTINA	59.7	37.0	96.7	67.7	53.8	121.5	61.5	64.8	126.3
BRAZIL	268.3	211.2	479.5	297.2	225.3	522.5	300.6	246.5	547.1
CHILE	9.0	4.4	13.4	8.8	5.1	13.9	9.7	6.0	15.7
COLOMBIA	84.4	21.8	106.2	84.0	20.3	104.3	85.1	23.8	108.9
COSTA RICA	7.7	0	7.7	9.3	0	9.3	9.3	0	9.3
ECUADOR	10.8	0	10.8	12.8	0	12.8	12.3	0	12.3
MEXICO	342.8	331.6	674.4	297.0	356.3	653.3	276.2	458.3	734.5
PERU	24.9	72.8	97.7	25.6	76.1	101.7	26.2	73.9	100.1
URUGUAY	4.0	8.8	12.8	4.0	7.1	11.1	4.4	7.5	11.9
VENEZUELA	27.6	13.2	40.8	29.5	23.1	52.6	31.5	48.3	79.8
TOTAL OTHER AMERICAS	**839.2**	**700.8**	**1540.0**	**835.9**	**767.1**	**1603.0**	**816.8**	**929.1**	**1745.9**
JAPAN	**1422.8**	**1669.5**	**3092.3**	**1334.2**	**1654.3**	**2988.5**	**1342.2**	**1613.3**	**2955.5**
CHINA, PRC	**297.4**	**1316.4**	**1613.8**	**339.1**	**1308.7**	**1647.8**	**460.8**	**1404.3**	**1865.1**
OTHER ASIA									
BANGLADESH	1.1	0	1.1	1.1	0	1.1	1.1	0	1.1
INDIA	281.1	145.9	427.0	306.7	179.9	486.6	353.4	233.0	586.4
INDONESIA	169.5	155.0	324.5	190.0	172.0	362.0	235.9	178.4	414.3
KOREA, REP. OF	901.0	888.2	1789.2	962.3	938.9	1901.2	1057.1	1081.6	2138.7
MALAYSIA	0	85.5	85.5	0	83.6	83.6	0	85.8	85.8
PAKISTAN	44.1	50.7	94.8	56.9	53.8	110.7	61.3	56.0	117.3
PHILIPPINES	48.5	26.9	75.4	44.1	33.1	77.2	50.7	28.0	78.7
SRI LANKA	2.6	0	2.6	2.9	0	2.9	3.3	0	3.3
TAIWAN	1123.2	1133.4	2256.6	1335.1	1381.2	2716.3	1576.5	1490.8	3067.3
THAILAND	93.9	121.3	215.2	88.2	125.7	213.9	113.1	148.1	261.2
TOTAL OTHER ASIA	**2665.0**	**2606.9**	**5271.9**	**2987.3**	**2968.2**	**5955.5**	**3452.4**	**3301.7**	**6754.1**
MIDDLE EAST, AFRICA & OCEANIA									
AUSTRALIA/N.Z.	32.2	2.2	34.4	35.9	2.2	38.1	35.3	2.4	37.7
EGYPT	12.3	60.8	73.1	13.9	67.5	81.4	15.2	70.8	86.0
IRAN	29.8	55.1	84.9	20.9	57.3	78.2	20.9	57.1	78.0
ISRAEL	30.2	16.1	46.3	23.1	17.6	40.7	25.4	22.0	47.4
KENYA	11.2	0	11.2	11.2	2.2	13.4	11.0	2.4	13.4
NIGERIA	7.1	6.6	13.7	7.7	6.8	14.5	8.8	6.8	15.6
SOUTH AFRICA	116.4	60.4	176.8	119.5	65.0	184.5	120.8	77.8	198.6
TANZANIA	4.4	0	4.4	5.5	0	5.5	6.6	0	6.6
TOTAL M.E., A. & O.	**243.6**	**201.2**	**444.8**	**237.7**	**218.6**	**456.3**	**244.0**	**239.3**	**483.3**
TOTAL WORLD	**12296.7**	**15235.1**	**27531.8**	**12552.7**	**15973.5**	**28526.2**	**13316.2**	**16984.8**	**30301.0**

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
2956.2	**3981.6**	**6937.8**	**2968.2**	**3908.7**	6876.9	***3365.0***	***4352.0***	***7717.0***	***3545.0***	***4565.0***	***8110.0***
167.8	**130.5**	**298.3**	**143.7**	**131.4**	275.1	***239.0***	***160.9***	***399.9***	***239.0***	***160.9***	***399.9***
59.7	45.0	104.7	52.7	43.7	96.4	*106.5*	*89.5*	*196.0*	*106.5*	*89.5*	*196.0*
277.3	251.1	528.4	291.4	251.8	543.2	*387.3*	*300.0*	*687.3*	*387.3*	*333.1*	*720.4*
10.1	6.2	16.3	10.6	6.6	17.2	*17.0*	*33.1*	*50.1*	*17.0*	*33.1*	*50.1*
79.4	28.4	107.8	85.1	27.6	112.7	*130.5*	*58.4*	*188.9*	*132.3*	*91.5*	*223.8*
9.5	0	9.5	0	0	0	*0*	*0*	*0*	*0*	*0*	*0*
14.3	0	14.3	14.3	0	14.3	*15.9*	*0*	*15.9*	*15.9*	*0*	*15.9*
291.7	470.9	762.6	261.7	479.5	741.2	*398.8*	*586.4*	*985.2*	*429.7*	*791.5*	*1221.2*
26.9	69.7	96.6	30.0	72.5	102.5	*43.7*	*83.8*	*127.5*	*43.7*	*83.8*	*127.5*
4.6	7.9	12.5	4.9	8.6	13.5	*11.0*	*12.1*	*23.1*	*11.0*	*12.1*	*23.1*
39.9	46.1	86.0	42.5	47.2	89.7	*54.5*	*81.6*	*136.1*	*54.5*	*81.6*	*136.1*
813.4	**925.3**	**1738.7**	**793.2**	**937.5**	1730.7	***1165.2***	***1244.9***	***2410.1***	***1197.9***	***1516.2***	***2714.1***
1364.4	**1616.0**	**2980.4**	**1448.2**	**1588.0**	3036.2	***1838.6***	***2041.5***	***3880.1***	***1955.5***	***2041.5***	***3997.0***
898.6	**1469.8**	**2368.4**	**908.3**	**1682.1**	2590.4	***1000.9***	***2215.6***	***3216.5***	***1058.2***	***2319.2***	***3377.4***
1.3	0	1.3	1.3	0	1.3	*2.2*	*0*	*2.2*	*2.2*	*39.7*	*41.9*
441.1	267.9	709.0	451.9	303.1	755.0	*712.1*	*659.2*	*1371.3*	*1080.3*	*952.4*	*2032.7*
238.5	190.9	429.4	269.0	231.5	500.5	*405.6*	*451.9*	*857.5*	*473.3*	*496.0*	*969.3*
1279.3	1178.8	2458.1	1386.3	1236.8	2623.1	*1555.1*	*1388.9*	*2944.0*	*1764.6*	*1479.3*	*3243.9*
0	88.2	88.2	0	99.2	99.2	*0*	*110.2*	*110.2*	*0*	*110.2*	*110.2*
40.1	71.2	111.3	39.7	57.3	97.0	*68.3*	*158.7*	*227.0*	*88.2*	*242.5*	*330.7*
54.0	33.1	87.1	55.8	37.5	93.3	*77.2*	*55.1*	*132.3*	*92.6*	*110.2*	*202.8*
3.3	0	3.3	4.4	0	4.4	*6.6*	*0*	*6.6*	*6.6*	*0*	*6.6*
1615.3	1537.7	3153.0	1727.3	1630.5	3357.8	*2048.7*	*2018.1*	*4066.8*	*2323.6*	*2093.0*	*4416.6*
123.5	164.0	287.5	132.3	187.4	319.7	*165.8*	*312.2*	*478.0*	*362.0*	*470.9*	*832.9*
3796.4	**3531.8**	**7328.2**	**4068.0**	**3783.3**	**7851.3**	***5041.6***	***5154.3***	***10195.9***	***6193.4***	***5994.2***	***12187.6***
33.5	2.6	36.1	37.5	2.6	40.1	*40.8*	*3.3*	*44.1*	*40.8*	*3.3*	*44.1*
18.1	75.4	93.5	20.7	84.7	105.4	*41.9*	*176.4*	*218.3*	*48.5*	*242.5*	*291.0*
21.8	55.1	76.9	22.7	66.1	88.8	*88.2*	*99.2*	*187.4*	*97.0*	*110.2*	*207.2*
26.5	17.6	44.1	27.3	0	27.3	*33.1*	*0*	*33.1*	*33.1*	*0*	*33.1*
11.0	2.4	13.4	10.8	2.4	13.2	*37.5*	*6.6*	*44.1*	*37.5*	*6.6*	*44.1*
9.9	6.8	16.7	9.9	7.1	17.0	*26.5*	*11.0*	*37.5*	*44.1*	*11.0*	*55.1*
133.8	77.6	211.4	135.4	79.1	214.5	*163.1*	*91.9*	*255.0*	*163.1*	*98.5*	*261.6*
6.6	0	6.6	6.6	0	6.6	*11.0*	*0*	*11.0*	*11.0*	*0*	*11.0*
261.2	**237.5**	**498.7**	**270.9**	**242.0**	512.9	***442.1***	***388.4***	***830.5***	***475.1***	***472.1***	***947.2***
14422.6	17241.5	31664.1	14811.2	17632.7	32443.9	*18340.3*	*22519.8*	*40860.1*	*19988.1*	*24237.5*	*44225.6*

TABLE 4:
WORLDWIDE ARTIFICIAL (CELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY
MILLION POUNDS

	ACTUAL PRODUCTION								
	1985			1986			1987		
COUNTRY	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
WESTERN EUROPE [a]									
AUSTRIA	32.8	240.3	273.1			271.2			264.6
BELGIUM/NETHERLANDS	92.6	0	92.6			88.2			88.2
FINLAND	0	132.3	132.3			121.3			119.0
FRANCE	15.4	33.1	48.5	DETAIL NO LONGER AVAILABLE		46.3	DETAIL NO LONGER AVAILABLE		50.7
GERMANY, FED. REP.	141.1	121.3	262.4			262.3			260.1
GREECE	15.4	0	15.4			17.0			17.2
ITALY	66.6	0	66.6			66.1			63.9
PORTUGAL	2.2	0	2.2			2.0			2.6
SPAIN	16.5	66.1	82.6			81.6			77.2
SWEDEN	0	72.8	72.8			48.7			50.7
TURKEY	2.2	15.4	17.6			17.6			17.6
UNITED KINGDOM	41.9	132.7	174.6			127.9			121.3
TOTAL WESTERN EUROPE	**426.7**	**814.0**	**1240.7**	**420.2**	**730.0**	**1150.2**	**407.8**	**725.3**	**1133.1**
EASTERN EUROPE									
BULGARIA	9.0	82.9	91.9	9.3	83.8	93.1	9.5	0	9.5
CZECHOSLOVAKIA	46.1	87.3	133.4	39.7	82.0	121.7	40.6	81.1	121.7
GERMANY, DEM. REP.	78.0	291.9	369.9	78.5	269.2	347.7	79.1	266.1	345.2
HUNGARY	0	12.1	12.1	0	12.1	12.1	0	9.0	9.0
POLAND	45.2	111.6	156.8	42.1	116.6	158.7	42.5	119.0	161.5
ROMANIA	19.4	116.8	136.2	19.8	121.3	141.1	19.8	125.7	145.5
USSR	542.3	749.6	1291.9	542.3	756.2	1298.5	543.4	760.6	1304.0
YUGOSLAVIA	32.8	121.3	154.1	33.3	123.5	156.8	29.3	110.2	139.5
TOTAL EASTERN EUROPE	**772.8**	**1573.5**	**2346.3**	**765.0**	**1564.7**	**2329.7**	**764.2**	**1471.7**	**2235.9**
TOTAL EUROPE	**1199.5**	**2387.5**	**3587.0**	**1185.2**	**2294.7**	**3479.9**	**1172.0**	**2197.0**	**3369.0**

Y Yarn+monofilaments.
S Staple+tow+fiberfill.
a. Starting in 1986 country detail is no longer available due to disclosure.
These totals do not include data for the Indonesian pilot plant nor production of artificial (cellulosic) fiber in North Korea.
Production and producing capacity by country, divided between rayon and acetate yarn, is given on pages 172 - 173.
Also note page 179 for data on production of cigarette tow.

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
DETAIL NO LONGER AVAILABLE		291.0	DETAIL NO LONGER AVAILABLE		299.8	DETAIL NO LONGER AVAILABLE		*297.6*	DETAIL NO LONGER AVAILABLE		*297.6*
		90.4			88.2			*94.8*			*94.8*
		133.2			142.9			*143.3*			*152.1*
		33.1			4.4			*6.6*			*6.6*
		269.0			284.4			*284.4*			*284.4*
		15.9			16.5			*17.6*			*17.6*
		70.5			77.2			*94.8*			*94.8*
		1.8			2.0			*4.4*			*4.4*
		81.6			88.2			*86.0*			*92.6*
		44.1			44.8			*45.2*			*55.1*
		19.2			20.5			*22.0*			*22.0*
		141.1			121.3			*154.3*			*165.3*
421.2	**769.7**	**1190.9**	**434.4**	**755.8**	**1190.2**	***457.4***	***793.6***	***1251.0***	***467.3***	***820.0***	***1287.3***
9.7	0	9.7	9.7	0	9.7	*11.0*	*92.6*	*103.6*	*11.0*	*92.6*	*103.6*
41.7	86.9	128.6	26.2	64.2	90.4	*59.5*	*101.4*	*160.9*	*59.5*	*101.4*	*160.9*
80.0	261.9	341.9	84.7	290.8	375.5	*86.0*	*352.7*	*438.7*	*86.0*	*352.7*	*438.7*
0	9.3	9.3	0	9.5	9.5	*22.0*	*22.0*	*44.0*	*22.0*	*44.1*	*66.1*
44.5	119.0	163.5	37.3	97.4	134.7	*50.7*	*157.6*	*208.3*	*50.7*	*157.6*	*208.3*
20.1	146.6	166.7	19.8	135.8	155.6	*24.3*	*194.0*	*218.3*	*24.3*	*194.0*	*218.3*
581.6	743.4	1325.0	540.3	747.1	1287.4	*639.3*	*778.2*	*1417.5*	*749.6*	*778.2*	*1527.8*
30.9	119.0	149.9	32.8	123.9	156.7	*37.5*	*132.3*	*169.8*	*37.5*	*138.9*	*176.4*
808.5	**1486.1**	**2294.6**	**750.8**	**1468.7**	**2219.5**	***930.3***	***1830.8***	***2761.1***	***1040.6***	***1859.5***	***2900.1***
1229.7	**2255.8**	**3485.5**	**1185.2**	**2224.5**	**3409.7**	***1387.7***	***2624.4***	***4012.1***	***1507.9***	***2679.5***	***4187.4***

TABLE 4:
WORLDWIDE ARTIFICIAL (CELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY COUNTRY *(CONTINUED)*

MILLION POUNDS

COUNTRY	ACTUAL PRODUCTION								
	1985			1986			1987		
	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
U.S.A.	204.6	353.2	557.8	214.8	404.2	619.0	191.1	414.3	605.4
CANADA	17.6	59.3	76.9	19.4	64.2	83.6	28.7	62.8	91.5
OTHER AMERICAS									
ARGENTINA	3.3	3.3	6.6	6.6	10.8	17.4	7.3	5.5	12.8
BRAZIL	44.3	58.4	102.7	37.0	74.1	111.1	33.1	74.7	107.8
CHILE	2.9	8.4	11.3	2.9	8.6	11.5	2.9	8.8	11.7
COLOMBIA	4.0	0	4.0	4.0	0	4.0	5.1	0	5.1
CUBA	4.6	14.1	18.7	5.7	19.2	24.9	3.7	19.4	23.1
MEXICO	27.8	0	27.8	26.5	0	26.5	25.1	0	25.1
PERU	3.7	0	3.7	1.8	0	1.8	2.4	0	2.4
URUGUAY	2.2	0	2.2	2.9	0	2.9	2.6	0	2.6
VENEZUELA	4.6	0	4.6	3.3	0	3.3	4.9	0	4.9
TOTAL OTHER AMERICAS	97.4	84.2	181.6	90.7	112.7	203.4	87.1	108.4	195.5
JAPAN	230.6	624.6	855.2	226.6	478.8	705.4	219.1	443.3	662.4
CHINA, PRC	112.4	286.6	399.0	116.8	286.6	403.4	121.3	291.0	412.3
OTHER ASIA									
BANGLADESH	6.6	2.2	8.8	8.8	2.4	11.2	9.9	2.9	12.8
INDIA	103.4	209.4	312.8	109.3	199.3	308.6	111.8	257.5	369.3
INDONESIA	0	89.7	89.7	0	101.6	101.6	0	114.6	114.6
KOREA, REP. OF	30.4	0	30.4	30.6	0	30.6	31.1	0	31.1
PAKISTAN	7.1	0	7.1	7.1	0	7.1	7.3	0	7.3
PHILLIPPINES	0	0	0	0	0	0	0	0	0
TAIWAN	5.3	263.4	268.7	6.2	258.2	264.4	5.3	258.4	263.7
THAILAND	0	41.9	41.9	0	41.9	41.9	0	47.2	47.2
TOTAL OTHER ASIA	152.8	606.6	759.4	162.0	603.4	765.4	165.4	680.6	846.0
MIDDLE EAST, AFRICA & OCEANIA									
EGYPT	15.4	10.4	25.8	15.4	10.4	25.8	15.4	10.6	26.0
IRAQ	6.6	12.1	18.7	6.6	12.1	18.7	6.8	12.1	18.9
TOTAL M.E., A & O	22.0	22.5	44.5	22.0	22.5	44.5	22.2	22.7	44.9
TOTAL WORLD	2036.9	4424.5	6461.4	2037.5	4267.1	6304.6	2006.9	4220.1	6227.0

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
213.9	399.8	613.7	217.5	362.8	580.3	219.0	323.0	542.0	219.0	323.0	542.0
28.9	73.2	102.1	28.9	73.9	102.8	32.0	83.8	115.8	54.0	83.8	137.8
7.3	0	7.3	7.7	0	7.7	26.0	11.0	37.0	26.0	11.0	37.0
32.8	80.7	113.5	32.6	88.6	121.2	37.5	91.9	129.4	37.5	91.9	129.4
2.9	9.0	11.9	2.9	9.3	12.2	3.3	11.9	15.2	3.3	11.9	15.2
5.3	0	5.3	5.5	0	5.5	7.7	0	7.7	7.7	0	7.7
1.3	23.4	24.7	1.5	16.8	18.3	3.3	24.3	27.6	3.3	24.3	27.6
26.5	0	26.5	26.9	0	26.9	34.8	0	34.8	34.8	0	34.8
2.9	0	2.9	3.1	0	3.1	3.7	0	3.7	3.7	0	3.7
2.9	0	2.9	2.9	0	2.9	4.2	0	4.2	4.2	0	4.2
4.9	0	4.9	5.1	0	5.1	5.3	0	5.3	5.3	0	5.3
86.8	113.1	199.9	88.2	114.7	202.9	125.8	139.1	264.9	125.8	139.1	264.9
220.0	420.6	640.6	218.3	383.6	601.9	258.8	473.8	732.6	258.8	473.8	732.6
116.8	264.6	381.4	110.2	286.6	396.8	143.3	363.8	507.1	143.3	374.8	518.1
10.6	2.2	12.8	10.6	2.2	12.8	11.9	11.0	22.9	11.9	11.0	22.9
116.0	267.9	383.9	116.8	275.6	392.4	173.9	370.6	544.5	173.9	374.3	548.2
0	130.1	130.1	0	132.3	132.3	0	213.0	213.0	0	369.5	369.5
33.3	0	33.3	33.7	0	33.7	37.5	61.7	99.2	37.5	61.7	99.2
6.2	0	6.2	7.1	0	7.1	7.7	0	7.7	7.7	0	7.7
0	0	0	0	0	0	0	55.1	55.1	0	55.1	55.1
5.7	271.6	277.3	5.7	319.7	325.4	7.1	325.4	332.5	8.8	329.4	338.2
0	52.9	52.9	0	90.8	90.8	0	92.6	92.6	0	92.6	92.6
171.8	724.7	896.5	173.9	820.6	994.5	238.1	1129.4	1367.5	239.8	1293.6	1533.4
15.4	11.0	26.4	17.4	11.5	28.9	17.6	11.9	29.5	17.6	11.9	29.5
6.4	12.1	18.5	6.6	12.3	18.9	7.7	14.3	22.0	7.7	14.3	22.0
21.8	23.1	44.9	24.0	23.8	47.8	25.3	26.2	51.5	25.3	26.2	51.5
2089.7	4274.9	6364.6	2046.2	4290.5	6336.7	2430.0	5163.5	7593.5	2573.9	5393.8	7967.7

TABLE 5:
WORLDWIDE RAYON VS. ACETATE FILAMENT YARN PRODUCTION & PRODUCING CAPACITY BY COUNTRY
MILLION POUNDS

COUNTRY	ACTUAL PRODUCTION								
	1985			1986			1987		
	H	R&C	A	H	R&C	A	H	R&C	A
WESTERN EUROPE									
AUSTRIA	22	11	0		DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE	
BELGIUM/NETHERLANDS	40	38	15						
FRANCE	0	15	0						
GERMANY, FED. REP. OF	88	53	0						
ITALY [a]	22	5	40						
SPAIN	+	9	7						
UNITED KINGDOM	0	0	42						
OTHER [b]	0	20	0						
TOTAL WESTERN EUROPE	**172**	**151**	**104**	**157**	**151**	**112**	**148**	**154**	**106**
EASTERN EUROPE									
BULGARIA	0	9	0	0	9	0	0	9	0
CZECHOSLOVAKIA	18	29	0	18	22	0	18	22	0
GERMANY, DEM. REP.	29	49	0	31	48	0	31	48	0
HUNGARY	0	0	0	0	0	0	0	0	0
POLAND	11	33	0	11	31	0	11	33	0
ROMANIA	11	9	0	11	9	0	11	9	0
USSR [a]	256	176	110	256	176	110	258	176	110
YUGOSLAVIA	18	15	0	15	18	0	13	15	0
TOTAL EASTERN EUROPE	**343**	**320**	**110**	**342**	**313**	**110**	**342**	**312**	**110**
U.S.A.	**20**	**13**	**172**	**15**	**13**	**187**	**15**	**13**	**163**
CANADA	**0**	**0**	**18**	**0**	**0**	**19**	**0**	**0**	**29**
OTHER AMERICAS									
ARGENTINA	0	0	4	0	0	7	0	0	7
BRAZIL	9	33	2	2	33	0	0	33	0
CHILE	0	3	0	0	3	0	0	3	0
COLOMBIA	0	0	4	0	0	4	0	0	5
CUBA	5	0	0	7	0	0	4	0	0
MEXICO	5	7	15	5	7	15	5	7	13
PERU	0	0	4	0	0	2	0	0	2
URUGUAY	0	0	2	0	0	2	0	0	3
VENEZUELA	0	0	4	0	0	4	0	0	5
TOTAL OTHER AMERICAS	**19**	**43**	**35**	**14**	**43**	**34**	**9**	**43**	**35**
JAPAN [a]	**4**	**164**	**63**	**4**	**163**	**60**	**4**	**155**	**60**
CHINA, PRC	**0**	**112**	**0**	**0**	**117**	**0**	**0**	**121**	**0**
OTHER ASIA									
BANGLADESH	0	7	0	0	9	0	0	10	0
INDIA	15	88	+	11	98	+	11	101	+
KOREA, REP. OF	0	26	4	0	26	4	0	27	4
PAKISTAN	0	0	7	0	0	7	0	0	7
TAIWAN	0	5	0	0	7	0	0	5	0
TOTAL OTHER ASIA	**15**	**126**	**11**	**11**	**140**	**11**	**11**	**143**	**11**
OTHER M.E., A & O [c]	**0**	**22**	**0**	**0**	**22**	**0**	**0**	**22**	**0**
WORLD TOTAL	**573**	**951**	**513**	**543**	**962**	**533**	**529**	**963**	**514**

NA No Longer Available
H High tenacity (tire & industrial type) viscose rayon yarn.
R Regular + intermediate tenacity viscose rayon yarn.
C Cuprammonium rayon yarn.
A Acetate + triacetate yarn.
a. Produces both regular + intermediate rayon yarn and cuprammonium rayon yarn.
b. Comprises Greece, Portugal and Turkey.
c. Comprises Egypt and Iraq.

ACTUAL PRODUCTION						PRODUCING CAPACITY					
1988			1989			3/1990			12/1991		
H	R&C	A	H	R&C	A	H	R&C	A	H	R&C	A
DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE			DETAIL NO LONGER AVAILABLE		
165	146	110	174	148	112	191	149	117	191	157	119
0	9	0	0	9	0	0	11	0	0	11	0
18	24	0	11	15	0	24	35	0	24	35	0
31	51	0	33	52	0	33	53	0	33	53	0
0	0	0	0	0	0	0	22	0	0	22	0
11	35	0	9	29	0	0	51	0	0	51	0
11	9	0	11	9	0	13	11	0	13	11	0
262	187	132	229	201	110	265	220	154	331	265	154
13	15	0	15	18	0	18	20	0	18	20	0
346	330	132	308	333	110	353	423	154	419	468	154
15	13	186	NA	NA	NA	NA	NA	NA	NA	NA	NA
0	0	29	NA	NA	NA	NA	NA	NA	NA	NA	NA
0	0	7	0	0	7	4	13	9	4	13	9
0	33	0	0	33	0	0	38	0	0	38	0
0	3	0	0	3	0	0	3	0	0	3	0
0	0	5	0	0	6	0	[illegible]	9	0	0	9
1	0	0	2	0	0	2	0	0	2	0	0
4	9	13	4	9	13	7	9	20	7	9	20
0	0	3	0	0	3	0	0	4	0	0	4
0	0	3	0	0	3	0	0	4	0	0	4
0	0	5	0	0	5	0	0	4	0	0	4
5	45	36	6	45	37	13	63	50	13	63	50
2	158	60	0	161	57	0	186	73	0	186	73
0	117	0	0	110	0	0	143	0	0	143	0
0	9	0	0	11	0	0	11	0	0	11	0
20	96	0	20	96	0	46	119	9	46	119	9
0	26	7	0	24	9	0	26	11	0	26	11
0	0	7	0	0	7	0	0	9	0	0	9
0	7	0	0	7	0	0	7	0	0	9	0
20	138	14	20	138	16	46	163	29	46	165	29
0	22	0	0	24	0	0	25	0	0	25	0
553	969	567	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 6:
WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY FIBER EXCEPT OLEFIN

MILLION POUNDS

	ACTUAL PRODUCTION								
	1985			1986			1987		
FIBER & AREA	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL
ACRYLIC+MODACRYLIC									
WEST EUROPE	2	2039	2041	2	2070	2072	2	2090	2092
EAST EUROPE	0	540	540	0	567	567	0	619	619
U.S.A.	0	631	631	0	615	615	0	592	592
CANADA	0	0	0	0	0	0	0	0	0
OTHER AMERICAS	0	295	295	0	340	340	0	399	399
JAPAN	4	838	842	7	869	876	7	891	898
CHINA, PRC	0	161	161	0	163	163	0	165	165
OTHER ASIA	0	703	703	0	721	721	0	758	758
MIDDLE EAST, AFRICA & OCEANIA	0	35	35	0	40	40	0	44	44
TOTAL	**6**	**5242**	**5248**	**9**	**5385**	**5394**	**9**	**5558**	**5567**
NYLON+ARAMID [a]									
WEST EUROPE	1173	335	1508	1140	311	1451	1142	302	1444
EAST EUROPE	1188	205	1393	1208	218	1426	1248	220	1468
U.S.A.	1515	827	2342	1605	908	2513	1697	992	2689
CANADA	119	26	145	119	31	150	112	29	141
OTHER AMERICAS	386	18	404	375	24	399	364	22	386
JAPAN	642	53	695	573	42	615	578	37	615
CHINA, PRC	154	2	156	163	2	165	174	2	176
OTHER ASIA	809	11	820	853	9	862	939	13	952
MIDDLE EAST, AFRICA & OCEANIA	123	2	125	126	2	128	128	2	130
TOTAL	**6109**	**1479**	**7588**	**6162**	**1547**	**7709**	**6382**	**1619**	**8001**
POLYESTER									
WEST EUROPE	994	1087	2081	985	1118	2103	994	1124	2118
EAST EUROPE	456	902	1358	526	948	1474	568	1041	1609
U.S.A.	1321	2021	3342	1173	2134	3307	1179	2362	3541
CANADA	47	102	149	47	111	158	46	99	145
OTHER AMERICAS	451	388	839	459	403	862	451	508	959
JAPAN	725	713	1438	710	683	1393	713	623	1336
CHINA, PRC	121	977	1098	154	1005	1159	265	1094	1359
OTHER ASIA	1856	1890	3746	2134	2235	4369	2512	2528	5040
MIDDLE EAST, AFRICA & OCEANIA	121	164	285	112	177	289	116	193	309
TOTAL	**6092**	**8244**	**14336**	**6300**	**8814**	**15114**	**6844**	**9572**	**16416**
OTHER FIBERS EXCEPT OLEFIN [b]									
WEST EUROPE	13	20	33	11	20	31	11	20	31
EAST EUROPE	2	6	8	2	7	9	2	7	9
U.S.A.	+	+	+	+	+	+	+	+	+
CANADA	0	0	0	0	0	0	0	0	0
OTHER AMERICAS	2	0	2	2	0	2	2	0	2
JAPAN	51	66	117	44	60	104	44	62	106
CHINA, PRC	22	176	198	22	139	161	22	143	165
OTHER ASIA	0	2	2	0	2	2	0	4	4
MIDDLE EAST, AFRICA & OCEANIA	0	0	0	0	0	0	0	0	0
TOTAL	**90**	**270**	**360**	**81**	**228**	**309**	**81**	**236**	**317**
TOTAL FIBERS ABOVE									
WEST EUROPE	2182	3481	5663	2138	3519	5657	2149	3536	5685
EAST EUROPE	1646	1653	3299	1736	1740	3476	1818	1887	3705
U.S.A.	2836	3479	6315	2778	3657	6435	2876	3946	6822
CANADA	166	128	294	166	142	308	158	128	286
OTHER AMERICAS	839	701	1540	836	767	1603	817	929	1746
JAPAN	1422	1670	3092	1334	1654	2988	1342	1613	2955
CHINA, PRC	297	1316	1613	339	1309	1648	461	1404	1865
OTHER ASIA	2665	2606	5271	2987	2967	5954	3451	3303	6754
MIDDLE EAST, AFRICA & OCEANIA	244	201	445	238	219	457	244	239	483
WORLD TOTAL	**12297**	**15235**	**27532**	**12552**	**15974**	**28526**	**13316**	**16985**	**30301**

Y Yarn+monofilaments.
S Staple+tow+fiberfill.
+ Nominal quantities.

a. U.S.A. nylon producing capacity data do not include aramid.
b. Other fibers are alginate, azlon, spandex or elastomer, saran, TFE-fluorocarbon, vinal and vinyon. U.S.A. production data do not include spandex.

ACTUAL PRODUCTION						PRODUCING CAPACITY						% UTILIZATION[c]	
1988			1989			3/1990			12/1991				
Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S	TOTAL	Y	S
2	1929	1931	2	1748	1750	2	2390	2392	2	2418	2420	100.0	73.5
0	611	611	0	635	635	0	877	877	0	948	948	0	72.6
0	589	589	0	543	543	0	641	641	0	651	651	0	84.6
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	399	399	0	399	399	0	494	494	0	600	600	0	82.8
7	871	878	7	800	807	13	939	952	13	939	952	53.8	83.6
0	170	170	0	220	220	0	276	276	0	335	335	0	79.7
0	774	774	0	800	800	0	966	966	0	1138	1138	0	84.7
0	37	37	0	31	31	0	44	44	0	90	90	0	70.5
9	**5380**	**5389**	**9**	**5176**	**5185**	**15**	**6627**	**6642**	**15**	**7119**	**7134**	**60.0**	**78.4**
1208	302	1510	1228	326	1554	1490	445	1935	1479	441	1920	83.7	74.9
1283	227	1510	1279	229	1508	1528	273	1801	1596	280	1876	84.3	85.1
1728	941	2669	1759	981	2740	2062	1142	3204	2126	1162	3288	88.1	85.8
119	29	148	123	35	158	214	53	267	214	53	267	57.5	66.0
353	15	368	328	18	346	527	31	558	527	31	558	58.1	43.9
589	33	622	586	35	621	705	60	765	822	60	882	82.7	58.3
205	2	207	229	2	231	262	44	306	320	55	375	90.7	7.3
1032	13	1045	1036	13	1049	1356	40	1396	1618	40	1658	78.0	44.8
134	2	136	141	2	143	231	7	238	231	7	238	62.1	25.0
6651	**1564**	**8215**	**6709**	**1641**	**8350**	**8375**	**2095**	**10470**	**8933**	**2129**	**11062**	**81.1**	**79.4**
1045	1188	2233	1074	1314	2388	1382	1384	2766	1378	1446	2824	79.0	95.0
613	1065	1678	605	1084	1689	822	1548	2370	849	1591	2440	77.3	72.4
1228	2452	3680	1209	2385	3594	1303	2569	3872	1419	2752	4171	90.3	91.9
49	101	150	19	96	115	25	108	133	25	108	133	77.6	85.3
458	511	969	463	519	982	634	720	1354	667	887	885	70.6	76.5
724	646	1370	811	682	1493	1054	825	1879	1054	825	1879	77.8	83.1
676	1168	1844	661	1323	1984	705	1731	2436	705	1764	2469	93.8	82.2
2766	2741	5507	3035	2970	6005	3687	4146	7833	4576	4813	9389	83.4	75.0
127	198	325	130	209	339	211	337	548	244	375	619	55.9	63.9
7686	**10070**	**17756**	**8007**	**10582**	**18589**	**9823**	**13368**	**23191**	**10917**	**14561**	**24809**	**81.9**	**81.5**
11	20	31	20	20	40	22	27	49	18	26	44	100.0	75.5
2	7	9	2	4	6	2	18	20	2	18	20	100.0	22.2
+	+	+	+	+	+	+	+	+	+	+	+	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	2	2	0	2	4	0	4	4	0	4	66.7	0
44	66	110	44	71	115	66	218	284	66	218	284	66.7	32.6
18	130	148	18	137	155	33	165	198	33	165	198	54.5	83.0
0	4	4	0	2	2	0	2	2	0	2	2	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	**227**	**304**	**86**	**234**	**320**	**127**	**430**	**557**	**123**	**429**	**552**	**68.8**	**54.6**
2266	3439	5705	2324	3408	5732	2896	4246	7142	2877	4331	7208	81.6	80.7
1898	1910	3808	1886	1952	3838	2352	2716	5068	2447	2837	5284	81.9	73.4
2956	3982	6938	2968	3909	6877	3365	4352	7717	3545	4565	8110	88.9	89.3
168	130	298	142	131	273	239	161	400	239	161	400	59.5	79.2
813	925	1738	793	936	1729	1165	1245	2410	1198	1518	2716	64.8	77.9
1364	1616	2980	1448	1588	3036	1838	2042	3880	1955	2042	3997	79.1	77.3
899	1470	2369	908	1682	2590	1000	2216	3216	1058	2319	3377	91.7	80.9
3798	3532	7330	4071	3785	7856	5043	5154	10197	6194	5993	12187	81.9	76.7
261	237	498	271	242	513	442	388	830	475	472	947	59.0	63.9
14423	**17241**	**31664**	**14811**	**17633**	**32444**	**18340**	**22520**	**40860**	**19988**	**24238**	**44226**	**81.4**	**79.9**

c. Based on 1989 production and average March 1989 vs. March 1990 producing capacity. Refer to July 1989 ***Fiber Organon*** for March 1989 producing capacity.

The regional totals here are the same as those on pages 164 -167.

TABLE 7:
PERCENT SHARE OF WORLDWIDE ARTIFICIAL (CELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY AREA

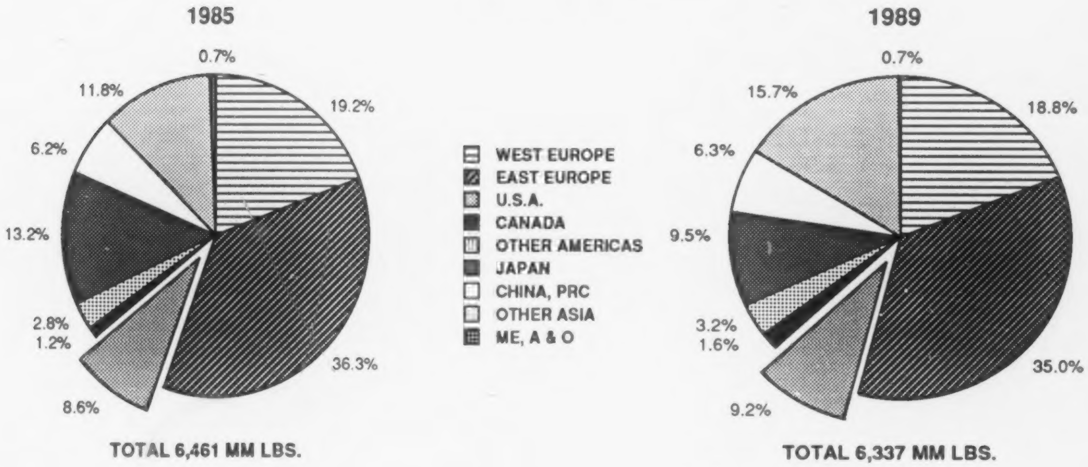
	PRODUCTION		PRODUCING CAPACITY	
AREA	1985	1989	3/1985	3/1990
WEST EUROPE	*19.2*	*18.8*	*18.7*	*16.5*
EAST EUROPE	*36.3*	*35.0*	*37.2*	*36.4*
U.S.A.	*8.6*	*9.2*	*9.5*	*7.1*
CANADA	*1.2*	*1.6*	*1.4*	*1.5*
OTHER AMERICAS	*2.8*	*3.2*	*3.0*	*3.5*
JAPAN	*13.2*	*9.5*	*11.7*	*9.6*
CHINA, PRC	*6.2*	*6.3*	*6.2*	*6.7*
OTHER ASIA	*11.8*	*15.7*	*11.0*	*18.0*
MIDDLE EAST, AFRICA & OCEANIA	*0.7*	*0.7*	*1.3*	*0.7*
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*

TABLE 8:
PERCENT SHARE OF WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY AREA

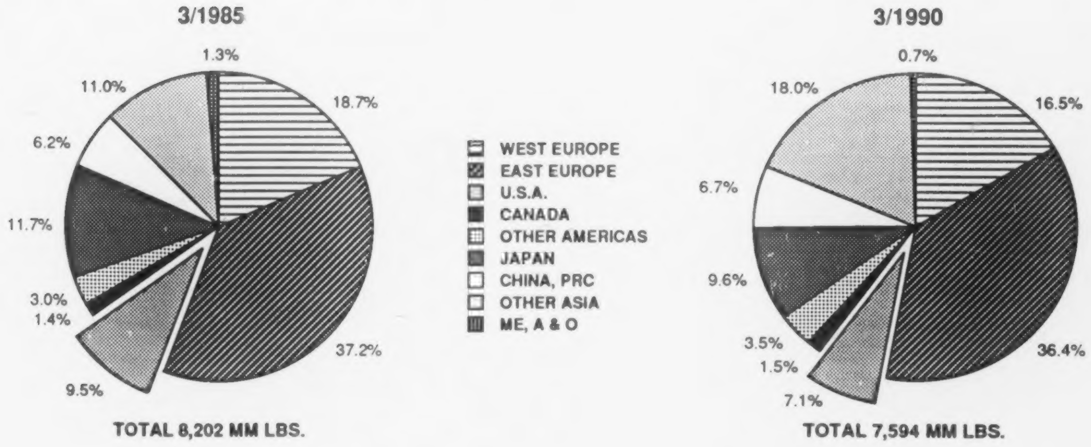
	PRODUCTION		PRODUCING CAPACITY	
AREA	1985	1989	3/1985	3/1990
WEST EUROPE	*20.6*	*17.7*	*19.3*	*17.5*
EAST EUROPE	*12.0*	*11.8*	*13.1*	*12.4*
U.S.A.	*22.9*	*21.2*	*23.4*	*18.9*
CANADA	*1.1*	*0.8*	*1.0*	*1.0*
OTHER AMERICAS	*5.6*	*5.3*	*6.1*	*5.9*
JAPAN	*11.2*	*9.4*	*10.7*	*9.5*
CHINA, PRC	*5.9*	*8.0*	*6.6*	*7.9*
OTHER ASIA	*19.1*	*24.2*	*17.5*	*24.9*
MIDDLE EAST, AFRICA & OCEANIA	*1.6*	*1.6*	*2.3*	*2.0*
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*

GRAPH 2:
PERCENT SHARE OF WORLDWIDE ARTIFICIAL (CELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY AREA

PRODUCTION

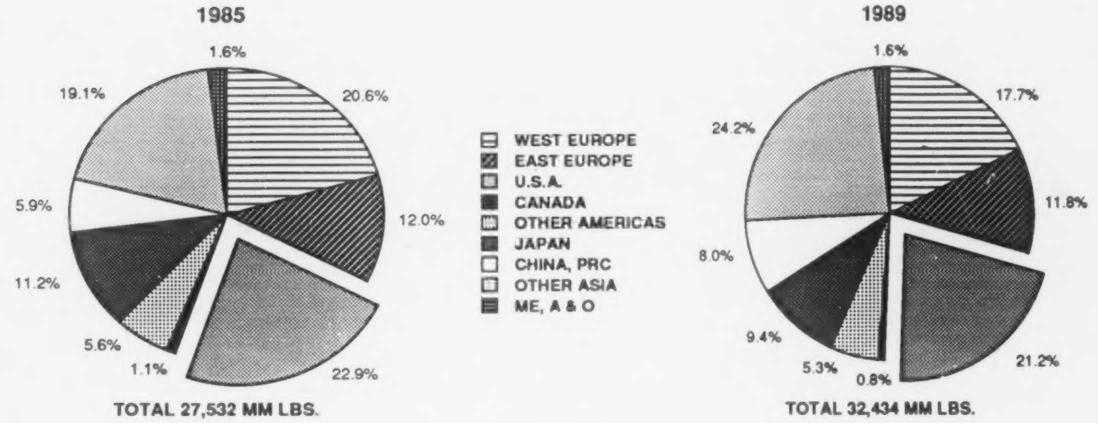


PRODUCING CAPACITY



GRAPH 3:
PERCENT SHARE OF WORLDWIDE SYNTHETIC (NONCELLULOSIC) FIBER PRODUCTION & PRODUCING CAPACITY BY AREA

PRODUCTION



PRODUCING CAPACITY

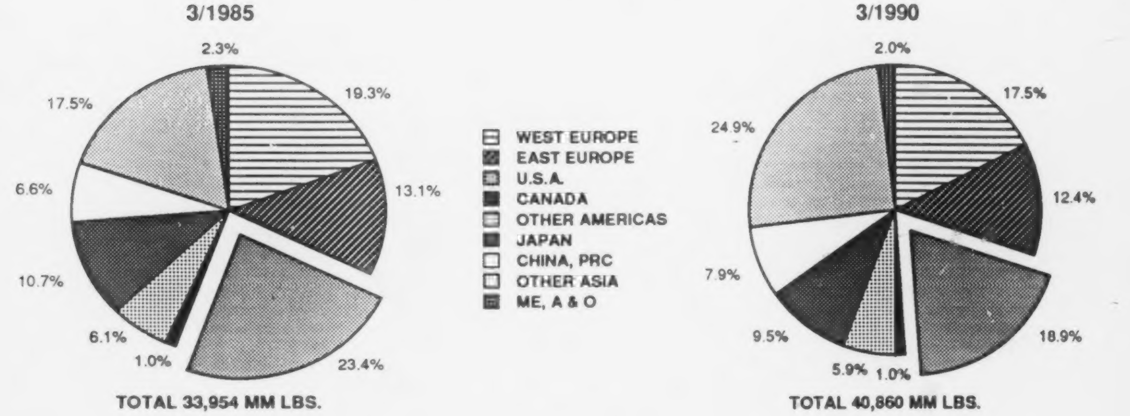


TABLE 9:
WORLDWIDE GLASS FIBER PRODUCTION & PRODUCING CAPACITY
MILLION POUNDS

	PRODUCTION					CAPACITY	
COUNTRY	1985	1986	1987	1988	1989	3/90	12/91
WEST EUROPE	705	802	897	1025	1036	*970*	*1190*
EAST EUROPE [a]						*220*	*243*
U.S.A.	1394	1389	1598	1609	1620	*1821*	*2046*
OTHER AMERICAS	71	77	110	143	143	*176*	*209*
JAPAN	602	529	661	750	761	*772*	*794*
MIDDLE EAST, AFRICA & OCEANIA [b]	62	66	77	121	143	*176*	*209*
TOTAL ABOVE	**2834**	**2863**	**3343**	**3648**	**3703**	***4135***	***4691***
CHINA P.R.C.	110	110	121	143	154	*220*	*243*
U.S.S.R.	187	220	243	276	293	*441*	*441*

Glass fiber is defined on page 122 of the June 1990 issue. The glass fiber producing capacity, is based on March 1990 and December 1991 annual projections.

[a] The data for East Europe do not include estimates for the U.S.S.R.

[b] The Other Asia, Africa & Oceania countries are Australia, India, Korea, Rep. of, South Africa and Taiwan.

TABLE 10:
ESTIMATED WORLDWIDE CIGARETTE TOW PRODUCTION
MILLION POUNDS

AREA	1985	1986	1987	1988	1989
EUROPE [a]	183	229	236	273	280
U.S.A.	463	476	545	549	584
OTHER AMERICAS [b]					
ASIA [c]	97	93	101	108	121
WORLD TOTAL	**743**	**798**	**882**	**930**	**985**

[a] Belgium, Germany, Fed. Rep., U.S.S.R. & United Kingdom.

[b] Brazil, Canada, Colombia, Mexico & Venezuela.

[c] Japan and Korea, Rep. of.

The following is an addition in the **Worldwide Directory of Manufactured Fiber Producers** which appeared in our June 1990 ***Fiber Organon.***

On page 140,
PERU

Add the following company name:
IBELTEX S.A.

Modacrylic	Lima (staple)

TABLE 11:
WORLDWIDE OLEFIN FIBER PRODUCTION
MILLION POUNDS

COUNTRY	1985	1986	1987	1988	1989
WEST EUROPE					
AUSTRIA	53	57	60	66	71
BENELUX	265	311	353	364	375
DENMARK	55	57	66	71	75
FINLAND	53	53	40	42	44
FRANCE	110	121	128	154	165
GREECE/CYPRUS	31	33	35	37	40
GERMANY, FED. REP.	218	229	254	298	320
IRELAND	20	20	22	22	22
ITALY	280	287	287	298	298
NORWAY	9	9	11	9	11
PORTUGAL	66	66	79	82	84
SPAIN	82	90	108	117	123
SWEDEN	13	13	13	15	18
SWITZERLAND	31	37	44	49	46
TURKEY	13	13	15	15	22
UNITED KINGDOM	209	243	276	309	320
TOTAL WEST EUROPE	**1508**	**1639**	**1791**	**1948**	**2034**
EAST EUROPE					
CZECHOSLOVAKIA	26	26	26	26	29
HUNGARY	37	44	49	57	62
POLAND	35	37	37	37	44
U.S.S.R.	49	53	53	55	55
U.S.A.					
YARN+MONOFIL	423	470	494	553	591
STAPLE	302	335	362	364	382
FILM FIBER	514	580	642	646	635
CANADA	106	121	134	137	146
OTHER AMERICAS					
ARGENTINA	33	42	53	40	33
BRAZIL	86	88	88	170	181
CHILE	11	13	15	13	15
COLOMBIA	0	0	7	7	7
EL SALVADOR GUATEMALA HONDURAS	7	7	7	7	7
MEXICO	57	60	60	62	62
NICARAGUA	2	2	2	2	2
PERU	13	15	15	15	15
URUGUAY	4	4	4	4	4
JAPAN					
YARN+MONOFIL	31	24	31	35	44
STAPLE	77	82	79	84	84
FILM FIBER	NA	NA	NA	NA	NA
OTHER ASIA					
KOREA, REP. OF	2	0	0	0	0
PHILIPPINES	7	7	7	7	7
TAIWAN	157	170	172	174	198
MIDDLE EAST, AFRICA & OCEANIA					
AUSTRALIA	51	55	57	57	62
SOUTH AFRICA	11	11	11	11	22
OTHER	2	2	2	2	2

The olefin data shown include the "official" country data published by a government, an association or other statistical agency as well as an estimate of the olefin fiber, mainly slit and split film fiber, believed to have been produced in the country. For example: although U.S. olefin production data include yarn, monofil, staple, film fiber, and spunbonded polypropylene, published Italian and Japanese olefin data show the production of yarn+monofilaments and staple+tow but no data on production of film fiber, such as that used in sacks, fishing nets, and carpet backing. Estimates were made in the latter example.

Due to the inconsistencies in olefin production reporting, we have made no attempt to show a worldwide total.

TABLE 12:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

	1990												YEAR TO DATE	
ITEMS & COUNTRY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3	1	89	68								228	11
BRAZIL	26	53	53	74	165								371	324
CANADA	628	303	171	405	377								1884	3329
CHILE	0	309	66	44	287								706	132
GERMANY, FED. REP. OF	422	516	844	684	783								3249	2948
IRELAND	145	0	36	35	34								250	245
JAPAN	104	72	111	104	170								561	611
KOREA, REP. OF	0	22	33	22	29								106	144
MEXICO	102	4	121	78	100								405	624
NETHERLANDS	282	264	345	178	275								1344	938
UNITED KINGDOM	34	22	60	0	38								154	490
ALL OTHER COUNTRIES [a]	21	56	22	49	25								173	303
TOTAL ARTIFICIAL YARN	**1831**	**1624**	**1863**	**1762**	**2351**								**9431**	**10099**
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493	108	1254	910								3084	1729
CANADA	4973	3854	4391	4333	4128								21679	17711
CHINA, PRC	0	0	0	0	0								0	1225
GERMANY, DEM. REP.	0	0	0	0	0								0	220
GERMANY, FED. REP. OF	89	134	257	322	347								1149	470
JAPAN	143	204	126	131	238								842	1463
SWITZERLAND	0	27	0	14	0								41	177
TAIWAN	354	988	1323	964	1732								5361	464
UNITED KINGDOM	89	93	73	37	162								454	607
ALL OTHER COUNTRIES [b]	337	301	183	136	32								989	886
TOTAL ARTIFICIAL STAPLE+TOW	**6304**	**6094**	**6461**	**7191**	**7549**								**33599**	**24952**
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0	43	34	9								86	87
BELGIUM	776	122	589	594	1384								3465	685
BRAZIL	70	71	57	180	118								496	509
CANADA	3834	2895	4150	3775	4492								19146	15058
COSTA RICA	762	517	497	462	787								3025	2178
ECUADOR	53	16	67	67	75								278	319
FRANCE	2007	1305	1065	1378	1223								6978	5728
GERMANY, FED. REP. OF	2096	2021	1480	1546	2024								9167	11947
ISRAEL	0	0	0	0	0								0	1122
ITALY	892	434	593	905	861								3685	4010
JAPAN	760	658	505	573	356								2852	2804
KOREA, REP. OF	31	0	90	20	46								187	245
MEXICO	1393	900	1607	1396	1145								6441	10438
NETHERLANDS	103	305	921	219	117								1665	935
SINGAPORE	16	16	0	0	33								65	58
TAIWAN	791	227	114	818	437								2387	5015
THAILAND	58	93	95	123	64								433	328
UNITED KINGDOM	1881	1492	2076	1029	1282								7760	7687
ALL OTHER COUNTRIES [c]	413	319	196	121	141								1190	759
TOTAL SYNTHETIC YARN	**15936**	**11391**	**14145**	**13240**	**14594**								**69306**	**69912**
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53	11	11	6								81	26
AUSTRALIA	38	120	30	72	63								323	290
BELGIUM	1	16	0	158	0								175	329
CANADA	3703	2439	3082	2325	2156								13705	6412
FRANCE	592	297	769	436	558								2652	1580
GERMANY, FED. REP. OF	1017	1236	1063	1205	1618								6139	7845
INDIA	1731	1055	4215	0	2528								9529	7881
IRELAND	0	26	0	0	0								26	1413
ITALY	422	318	534	204	206								1684	1189
JAPAN	1754	1763	2307	1539	1531								8894	11032
KOREA, REP. OF	1786	1273	1778	2043	3441								10321	19469
MEXICO	3590	2041	2015	2355	3385								13386	3640
NETHERLANDS	1	0	57	20	10								88	370
SPAIN	35	0	0	0	0								35	290
SWITZERLAND	399	124	87	385	107								1102	736
TAIWAN	888	572	931	1400	1476								5267	2437
TURKEY	112	114	0	0	0								226	129
UNITED KINGDOM	2249	1868	2834	2159	2242								11352	11043
ALL OTHER COUNTRIES [d]	549	326	137	92	219								1323	185
TOTAL SYNTHETIC STAPLE+TOW	**18867**	**13641**	**19850**	**14404**	**19546**								**86308**	**76296**

[a] Italy 50, Ecuador 33, India 33, France 24, Uruguay 13, Belgium 12, Taiwan 4, Thailand 3, Hong Kong 1.

[b] Poland 384, Sweden 310, Finland 121, Thailand 66, France 59, Netherlands 44, Brazil 3, Italy 2.

[c] Portugal 449, Spain 194, Paraguay 83, Ireland 82, Switzerland 78, Turkey 70, El Salvador 60, Sweden 41, Hong Kong 40, Morocco 23,Finland 22, Austria 19, Yugoslavia 8, Haiti 6, Honduras 5, Colombia 3, Greece 3, Australia 2, Dominican Republic 2.

[d] Venezuela 395, China, PRC 224, Thailand 209, Sweden 180, Malaysia 88, Brazil 80, Hong Kong 64, Poland 47, Romania 29, Denmark 7.

TABLE 13:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208	240	163	110								963	1104
TEXTURED	54	8	0	33	32								127	205
OTHER	1385	1371	1471	1528	2171								7926	8311
MONOFILAMENTS & STRIPS	150	37	152	38	38								415	479
SUBTOTAL ABOVE	**1831**	**1624**	**1863**	**1762**	**2351**								**9431**	**10099**
STAPLE	5989	5884	6154	6846	7218								32091	24744
TOW	312	210	307	342	331								1502	157
TOPS	3	0	0	3	0								6	51
SUBTOTAL ABOVE	**6304**	**6094**	**6461**	**7191**	**7549**								**33599**	**24952**
WASTE	**0**	**0**	**0**	**22**	**0**								**22**	**400**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856	1437	1000	1336								6064	7043
TEXTURED														
UP TO 450 DENIER	270	333	253	338	520								1714	1565
OVER 450 DENIER	2936	1350	2132	3039	3721								13178	6328
OTHER	4531	3817	4273	2090	2435								17146	19053
MONOFILAMENTS & STRIPS	216	117	148	191	134								806	545
SUBTOTAL ABOVE	**9388**	**6473**	**8243**	**6658**	**8146**								**38908**	**34534**
POLYESTER														
HIGH TENACITY	614	408	506	421	345								2294	4031
TEXTURED	785	643	626	923	581								3558	7835
POY	719	119	117	758	251								1964	4514
OTHER	2038	1457	1459	1683	1949								8586	7416
MONOFILAMENTS & STRIPS	53	0	67	40	53								213	258
SUBTOTAL ABOVE	**4209**	**2627**	**2775**	**3825**	**3179**								**16615**	**24054**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408	2224	1880	2281								9244	8420
OTHER	277	223	301	276	307								1384	1431
MONOFILAMENTS & STRIPS	611	660	602	601	681								3155	1473
SUBTOTAL ABOVE	**2339**	**2291**	**3127**	**2757**	**3269**								**13783**	**11324**
STAPLE														
NYLON	4048	3037	4055	3032	3267								17439	8481
POLYESTER	9261	5813	9622	6652	12118								43466	42179
ACRYLIC	1711	1729	2063	1586	860								7949	7262
POLYPROPYLENE	543	37	160	27	105								872	740
OTHER	196	190	320	146	151								1003	2770
TOW														
NYLON	409	308	555	385	603								2260	1772
POLYESTER	15	70	70	2	26								183	445
ACRYLIC	2512	1973	2649	2252	2133								11519	10249
OTHER	70	5	35	105	135								350	383
TOPS	102	479	321	217	148								1267	2015
SUBTOTAL ABOVE	**18867**	**13641**	**19850**	**14404**	**19546**								**86308**	**76296**
WASTE														
NYLON	2694	2074	1628	1933	1267								9596	9565
POLYESTER	2703	2241	1882	1067	3127								11020	3944
OTHER	444	571	1027	602	838								3482	2631
TOTAL MANUFACTURED FIBERS ABOVE	48779	37636	46856	40221	49272								**222764**	**197799**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59	54	62	59								349	459
SPUN YARN	427	503	318	594	534								2376	1963
SPUN YARNS														
SYNTHETIC	2420	2155	2639	1902	2841								11957	23318
ARTIFICIAL	0	0	0	0	0								0	0
PUT UP FOR RETAIL SALE	32	24	70	34	87								247	250
GRAND TOTAL ABOVE	51773	40377	49937	42813	52793								237693	223789

SOURCE: U.S. Census Bureau Report IM145X

TABLE 14:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37	44	6	45								224	123
TEXTURED	217	9	30	284	101								641	539
OTHER	66	106	57	64	46								339	856
MONOFILAMENTS & STRIPS	97	0	15	11	26								149	195
SUBTOTAL ABOVE	**472**	**152**	**146**	**365**	**218**								**1353**	**1713**
STAPLE	1195	2051	1838	1329	1645								8058	8517
TOPS	333	0	203	187	185								908	284
SUBTOTAL ABOVE	**1528**	**2051**	**2041**	**1516**	**1830**								**8966**	**8801**
WASTE	**330**	**407**	**614**	**547**	**603**								**2501**	**6200**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357	9332	8892	15463								48801	49565
TEXTURED														
UP TO 450 DENIER	1571	588	626	2098	791								5674	3312
OVER 450 DENIER	5636	4353	5225	4130	3350								22694	23742
OTHER	2637	2264	3143	2401	2191								12636	11033
MONOFILAMENTS & STRIPS	8	32	93	33	42								208	1019
SUBTOTAL ABOVE	**17609**	**14594**	**18419**	**17554**	**21837**								**90013**	**89671**
POLYESTER														
HIGH TENACITY	4308	5166	5459	4737	3944								23614	16422
TEXTURED	3074	3021	4078	3508	3650								17331	15860
POY	1831	2368	1287	1783	2918								10187	6468
OTHER	1297	1746	1824	1275	2294								8436	4180
MONOFILAMENTS & STRIPS	185	285	91	93	188								842	1058
SUBTOTAL ABOVE	**10695**	**12586**	**12739**	**11396**	**12994**								**60410**	**43988**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523	549	801	424								2832	4257
OTHER	2035	2007	2279	2972	4061								13354	7837
MONOFILAMENTS & STRIPS	876	913	1664	1218	1223								5894	3922
SUBTOTAL ABOVE	**3446**	**3443**	**4492**	**4991**	**5708**								**22080**	**16016**
STAPLE														
NYLON	3163	2765	2343	3257	2210								13738	15041
POLYESTER	7157	6405	9490	7701	8861								39614	61348
ACRYLIC	4584	3178	3882	3936	4697								20277	28881
POLYPROPYLENE	2038	1561	2666	3226	2211								11702	9012
OTHER	2688	923	1504	961	1818								7894	8657
TOW														
NYLON	121	176	155	304	145								901	380
POLYESTER	18	64	0	100	6								188	1714
ACRYLIC	1710	1787	989	956	1245								6687	9752
OTHER	26	12	15	243	0								296	723
TOPS	3984	2729	2309	4760	2552								16334	8318
SUBTOTAL ABOVE	**25489**	**19600**	**23353**	**25444**	**23745**								**117631**	**143826**
WASTE														
NYLON	4117	4250	3894	2746	3957								18964	11389
POLYESTER	3268	2845	2782	3321	2596								14812	20758
OTHER	3343	3700	4979	4352	4994								21368	33952
TOTAL MANUFACTURED FIBERS ABOVE	**70297**	**63628**	**73459**	**72232**	**78482**								**358098**	**375314**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	28	45	32	25	68								198	190
SPUN YARN	0	0	0	0	0								0	0
SPUN YARNS														
SYNTHETIC	3007	4304	3749	4278	4103								19441	15198
ARTIFICIAL	0	0	0	0	0								0	0
PUT UP FOR RETAIL SALE	287	398	641	746	789								2861	3381
GRAND TOTAL ABOVE	**73619**	**68375**	**77881**	**77281**	**83442**								**380598**	**394083**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 15:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

	1990												YEAR TO DATE[a]	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4	18.1	17.4	16.9							100.3	111.1
RAYON STAPLE	30.1	25.3	26.3	28.2	25.1	22.6							157.6	200.2
TOTAL ARTIFICIAL (CELLULOSIC)	**45.2**	**40.7**	**43.7**	**46.3**	**42.5**	**39.5**							**257.9**	**311.3**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4	28.4	28.8	27.6							168.4	188.3
- CARPET	86.5	81.1	82.2	85.6	80.1	75.8							491.3	476.2
- TEXTILE[f]	28.9	28.2	29.9	32.0	32.0	31.2							182.2	204.7
POLYESTER - INDUSTRIAL[d]	27.2	28.6	31.8	32.5	30.4	30.2							180.7	184.6
- TEXTILE[f]	56.6	56.2	58.0	69.8	68.4	61.4							370.4	440.1
OLEFIN[e]	104.5	113.9	114.1	119.5	119.9	117.1							689.0	635.1
TOTAL YARN	**328.6**	**338.3**	**344.4**	**367.8**	**359.6**	**343.3**							**2082.0**	**2129.0**
STAPLE+TOW+FIBERFILL														
NYLON	88.8	74.9	86.0	85.0	87.0	77.6							499.3	485.5
ACRYLIC+MODACRYLIC	40.4	39.7	43.2	39.7	43.0	43.8							249.8	281.4
POLYESTER	168.9	175.7	173.2	181.9	176.0	167.7							1043.4	1226.6
OLEFIN	30.3	34.4	35.3	35.2	36.1	37.2							208.5	191.9
TOTAL STAPLE	**328.4**	**324.7**	**337.7**	**341.8**	**342.1**	**326.3**							**2001.0**	**2185.4**
TOTAL SYNTHETIC (NONCELLULOSIC)	**657.0**	**663.0**	**682.1**	**709.6**	**701.7**	**669.6**							**4083.0**	**4314.4**
TOTAL MANUFACTURED FIBER	**702.2**	**703.7**	**725.8**	**755.9**	**744.2**	**709.1**							**4340.9**	**4625.7**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8	9.1	7.6	8.7							8.7	8.9
RAYON STAPLE	20.2	17.2	14.0	14.2	11.9	10.1							10.1	15.8
TOTAL ARTIFICIAL (CELLULOSIC)	**29.9**	**27.1**	**22.8**	**23.3**	**19.5**	**18.8**							**18.8**	**24.7**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4	36.0	30.1	35.7							35.7	24.5
- CARPET	60.5	61.2	62.6	63.2	65.4	78.2							78.2	66.8
- TEXTILE[f]	57.0	59.9	64.3	63.5	63.5	62.9							62.9	49.2
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5	39.2	37.9	35.8							35.8	31.9
- TEXTILE[f]	94.5	104.9	109.9	106.4	99.7	100.8							100.8	89.1
OLEFIN[e]	68.1	66.6	66.0	63.9	63.9	64.9							64.9	60.7
TOTAL YARN	**356.2**	**366.9**	**375.7**	**372.2**	**360.5**	**378.3**							**378.3**	**322.2**
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1	44.3	47.7	60.5							60.5	57.0
ACRYLIC+MODACRYLIC	69.5	70.9	72.8	75.3	78.9	83.2							83.2	69.7
POLYESTER	193.5	195.1	192.9	217.4	210.8	212.4							212.4	191.0
OLEFIN	34.6	33.4	31.5	29.8	28.5	28.6							28.6	33.3
TOTAL STAPLE	**337.7**	**339.9**	**334.3**	**366.8**	**365.9**	**384.7**							**384.7**	**351.0**
TOTAL SYNTHETIC (NONCELLULOSIC)	**693.9**	**706.8**	**710.0**	**739.0**	**726.4**	**763.0**							**763.0**	**673.2**
TOTAL MANUFACTURED FIBER	**723.8**	**733.9**	**732.8**	**762.3**	**745.9**	**781.8**							**781.8**	**697.9**
	COTTON CONSUMPTION													
RAW COTTON	317.3	332.1	365.9	327.8	340.0								1683.1	1632.0
	WOOL CONSUMPTION[g]													
	1ST QUARTER			2ND QUARTER			3RD QUARTER			4TH QUARTER				
APPAREL CLASS WOOL	29.9												29.9	35.8
CARPET CLASS WOOL	3.8												3.8	3.3
TOTAL RAW WOOL	33.7												**33.7**	**39.1**

---

[a] "Year to date" totals for stock, are the latest month's figures.

[b] The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

[c] Producers' total domestic shipments plus export shipments.

[d] Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

[e] Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

[f] Includes low denier industrial yarn.

[g] **Wool data for 1990 available on a quarterly basis only.**

C3460-1

FIBER ORGANON

Formerly Textile Organon

Volume 61, No. 8 ☐ August 1990

A publication of *Fiber Economics Bureau, Inc.*

Highlights

- Worldwide Weaving Machinery In Place ...begins on page 187.
- Quarterly Manufactured Fiber Data ...see pages 198 - 199.

SHIPMENTS:

In July, total manufactured fiber shipments reached 674 million pounds, 6% below the 714 million pounds shipped in June and 4% below the 701 million pounds shipped in July 1989.

July shipments of synthetic (noncellulosic) filament yarn fell 5% to 331 million pounds and staple+tow fell 8% to 299 milion pounds.

Contributing to the decrease in shipments over the previous month were olefin staple down 15% or 6 million pounds, acrylic+modacrylic staple down 12% or 5 million pounds and nylon industrial yarn down 3 million pounds or 10%.

Year-to-date domestic shipments of manufactured fiber are down 6% and exports are down 5%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

	1990		% CHG	1989	% CHG	YEAR TO DATE		% CHG YTD
ITEM	JUL	JUN	7/90-6/90	JUL	7/90-7/89	1990	1989	1990-1989
ARTIFICIAL (CELLULOSIC)								
YARN	19.1	16.9	*+13.0*	18.9	*+1.1*	119.4	129.9	*-8.1*
RAYON STAPLE	24.8	22.6	*+9.7*	24.8	*- -*	182.4	225.0	*-18.9*
TOTAL ARTIFICIAL (CELL.)	**43.9**	**39.5**	***+11.1***	**43.7**	***+0.5***	**301.8**	**354.9**	***-15.0***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	24.9	27.6	*-9.8*	29.1	*-14.4*	193.3	217.4	*-11.1*
- CARPET	71.8	75.8	*-5.3*	73.4	*-2.2*	563.1	549.6	*+2.5*
- TEXTILE [a]	29.0	31.3	*-7.3*	31.8	*-8.8*	211.3	236.5	*-10.7*
POLYESTER - INDUSTRIAL	28.2	30.2	*-6.6*	29.8	*-5.4*	209.0	214.4	*-2.5*
- TEXTILE [a]	59.7	61.4	*-2.8*	72.5	*-17.7*	430.1	512.6	*-16.1*
OLEFIN	117.4	122.2	*-3.9*	94.8	*+23.8*	828.7	729.9	*+13.5*
TOTAL YARN	**331.0**	**348.5**	***-5.0***	**331.4**	***-0.1***	**2435.5**	**2460.4**	***-1.0***
STAPLE+TOW+FIBERFILL								
NYLON	72.2	77.6	*-7.0*	74.9	*-3.6*	571.5	560.4	*+2.0*
ACRYLIC+MODACRYLIC	38.6	43.8	*-11.9*	41.1	*-6.1*	288.4	322.5	*-10.6*
POLYESTER	156.7	167.6	*-6.5*	182.3	*-14.0*	1200.6	1408.9	*-14.8*
OLEFIN	31.4	37.1	*-15.4*	27.8	*+12.9*	239.6	219.7	*+9.1*
TOTAL STAPLE	**298.9**	**326.1**	***-8.3***	**326.1**	***-8.3***	**2300.1**	**2511.5**	***-8.4***
TOTAL SYNTHETIC (NONCELL.)	**629.9**	**674.6**	***-6.6***	**657.5**	***-4.2***	**4735.6**	**4971.9**	***-4.8***
TOTAL MANUFACTURED FIBER	**673.8**	**714.1**	***-5.6***	**701.2**	***-3.9***	**5037.4**	**5326.8**	***-5.4***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS [b]	630.9	671.4	*-6.0*	662.4	*-4.8*	4754.2	5028.6	*-5.5*
EXPORTS [c]	42.9	42.7	*+0.5*	38.8	*+10.6*	283.2	298.2	*-5.0*

- - No change.
a. Includes low denier industrial yarn.
b. Includes olefin exports.
c. Excludes olefin exports.

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BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc.
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U.S.A.
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Facsimile: (201) 228-7598

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CONTENTS

Features

Worldwide Weaving Machinery In Place 187 - 194
  Graph 1: Worldwide Weaving Machinery Primarily Spun Yarn - Cotton System 187
  Graph 2: Comparison of Worldwide Weaving Machinery 188
  Worldwide Weaving Machinery 188 - 191
    - By Area 188
    - By Country 189 - 191
  Automatic Shuttle-Less Looms in Developed and Developing Countries 192
  Automatic Shuttle Looms in Developed and Developing Countries 193
  Non-Automatic Looms in Developed and Developing Countries 194
  Graph 3: Comparison of Automatic Shuttle-Less Looms in Developed and Developing Countries 192
  Graph 4: Comparison of Automatic Shuttle Looms in Developed and Developing Countries 193
  Graph 5: Comparison of Non-Automatic Looms in Developed and Developing Countries 194

Industry Regulars

Total U.S. Manufactured Fiber Shipments 185

Monthly U.S. Manufactured Fiber Data 195 - 197
  Imports by Country of Origin 195
  Imports by Fiber 196
  Exports by Fiber 197

Quarterly Manufactured Fiber Data 198 - 199
  Yarn+Monofilaments 198
  Staple+Tow 199

Selected U.S. Monthly Fiber Data 200

The following is a correction in the **Worldwide Manufactured Fiber Producer Affiliations & Percentage of Capital Ownership** which appeared in our June 1990 ***Fiber Organon.***

On page 151,
HOECHST A.G. (WEST GERMANY)

Please change the following:
Mexico Celanese Mexicana, S.A. 40%; public 60%
to:
Mexico Celanese Mexicana, S.A. 51%; public 49%

WORLDWIDE WEAVING MACHINERY IN PLACE

From 1980 to 1988 the total number of weaving machinery installed worldwide, fell 4% to 2.7 billion, according to the International Textile Manufacturers Federation. Below are some of the highlights concerning the developed countries.

- The total weaving machinery installed in the developed countries fell from 44% in 1980 to 33% in 1988. (Table 2)
- In 1988, 74% of automatic shuttle-less looms in place were in the developed countries. (Table 4)
- Between 1980 and 1988, automatic shuttle looms in place fell by 51% in the developed countries. (Table 5)

GRAPH 1:
WORLDWIDE WEAVING MACHINERY
PRIMARILY SPUN YARN - COTTON SYSTEM

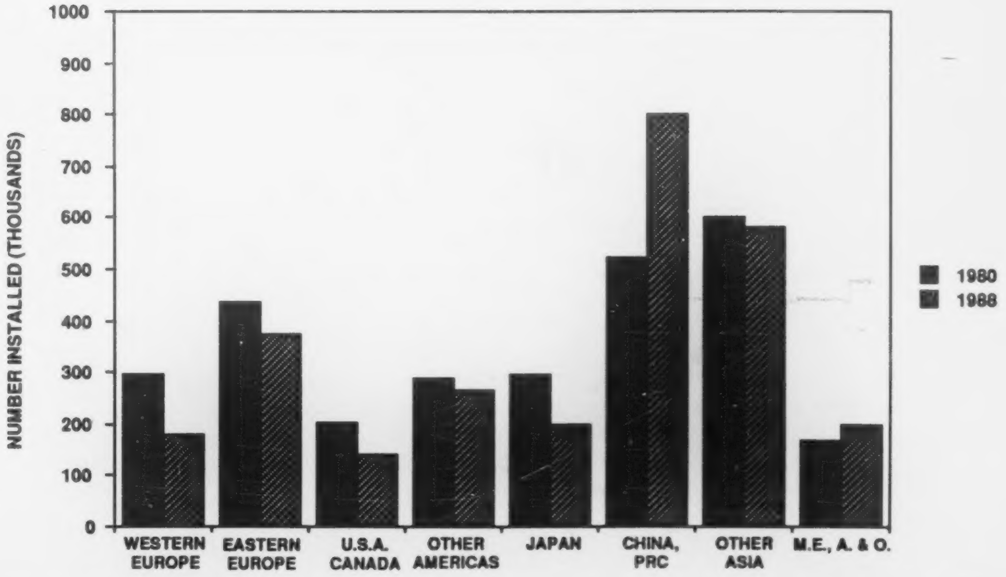

TABLE 2:
WORLDWIDE WEAVING MACHINERY

	LOOMS (75 CM OR WIDER) PRIMARILY FOR WEAVING YARN SPUN ON THE COTTON SYSTEM							
	AUTOMATIC LOOMS				NON-AUTOMATIC LOOMS		TOTAL	
	SHUTTLE-LESS		SHUTTLE					
AREA	NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR	
	1980	1988	1980	1988	1980	1988	1980	1988
WESTERN EUROPE	40,295	82,990	217,209	67,670	39,679	29,400	297,183	180,060
EASTERN EUROPE	92,778	202,300	278,644	162,930	64,618	9,260	436,040	374,490
U.S.A.	38,681	64,180	158,489	65,460			197,170	129,640
CANADA	400	2,650	6,850	8,000			7,250	10,650
OTHER AMERICAS	21,529	32,410	247,048	224,850	19,870	8,500	288,447	265,760
JAPAN	14,498	40,000	104,016	69,540	179,223	90,450	297,737	199,990
CHINA, PRC		15,000	310,000	660,000	215,000	125,000	525,000	800,000
OTHER ASIA	17,585	67,090	356,979	351,420	227,188	164,110	601,752	582,620
M.E., A. & O.	10,373	23,130	134,861	144,940	23,914	32,100	169,148	200,170
TOTAL WORLD	236,139	529,750	1,814,096	1,754,810	769,492	458,820	2,819,727	2,743,380

SOURCE: ITMF (International Textile Manufacturers Federation) *International Cotton Industry Statistics*, Volumes 24/1981 & 31/1988.

GRAPH 2:
COMPARISON OF WORLDWIDE WEAVING MACHINERY

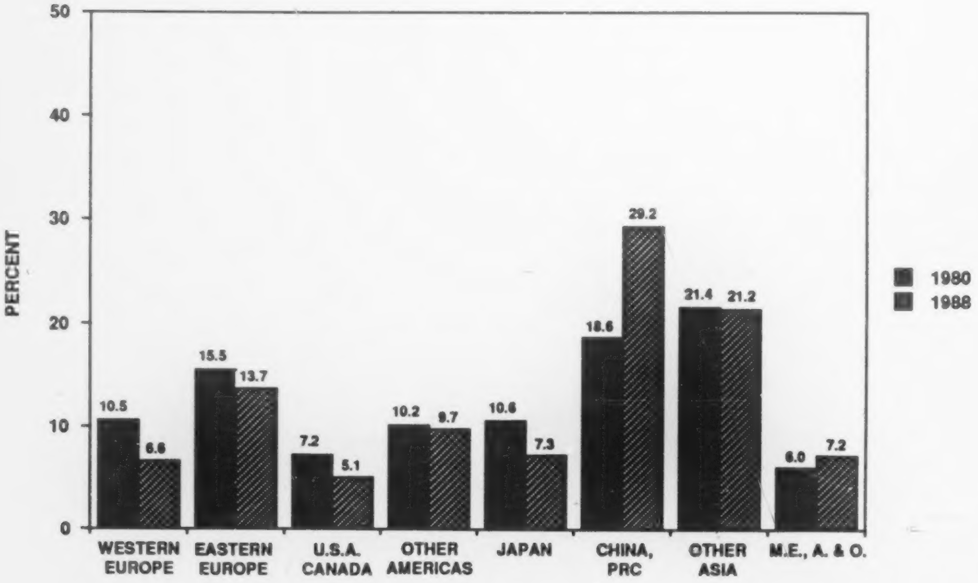

TABLE 3:
WORLDWIDE WEAVING MACHINERY

	LOOMS (75 CM OR WIDER) PRIMARILY FOR WEAVING YARN SPUN ON THE COTTON SYSTEM							
	AUTOMATIC LOOMS				NON-AUTOMATIC LOOMS		TOTAL	
	SHUTTLE-LESS		SHUTTLE					
COUNTRY	NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR	
	1980	1988	1980	1988	1980	1988	1980	1988
WESTERN EUROPE								
AUSTRIA	852	1,760	3,613	650	38		4,503	2,410
BELGIUM[c]	1,352 *	5,300	14,678 *	3,650	1,170	350	17,200	9,300
DENMARK *		180	540	520	150		690	700
FINLAND	307	480	1,634		138		2,079	480
FRANCE[c]	7,200	10,220	24,300	2,640	2,800	360	34,300	13,220
GERMANY, FED. REP.[c,i]	5,100	12,680	32,374	4,600	240		37,714	17,280
GREECE	1,800	3,240	6,950	7,000	1,750		10,500	10,240
IRELAND	700	900	350	350			1,050	1,250
ITALY[c]	7,220	18,150	36,793	6,440	1,291		45,304	24,590
NETHERLANDS[b]	1,312	1,410	2,034	490	91		3,437	1,900
NORWAY	217	250	453	250			670	500
PORTUGAL *	2,000	7,600	18,600	15,000	15,000		35,600	22,600
SPAIN[c]	3,333 *	6,220	20,813	9,060	3,835		27,981	15,280
SWEDEN	188	280	107		243		538	280
SWITZERLAND[c]	876	1,800	5,674	1,300	10		6,560	3,100
TURKEY	1,431	7,200	32,627	10,000	6,858	28,000	40,916	45,200
UNITED KINGDOM[b]	6,407	5,320	15,669	5,720	6,065	690	28,141	11,730
TOTAL WESTERN EUROPE	**40,295**	**82,990**	**217,209**	**67,670**	**39,679**	**29,400**	**297,183**	**180,060**
EASTERN EUROPE								
BULGARIA *	2,990	5,000	10,850	6,000	1,850		15,690	11,000
CZECHOSLOVAKIA		5,000	24,310	19,000	7,243	1,000	31,553	25,000
GERMANY, DEM. REP.[j]	1,650	5,000	18,000	9,000	18,000 *	1,000	37,650	15,000
HUNGARY	2,528	3,270	5,682	4,120	1,314	40	9,524	7,430
POLAND	7,160	11,370	13,502	11,900	11,711	2,810	32,373	26,080
ROMANIA	750	1,500	7,800	8,000	10,000	4,000	18,550	13,500
USSR *	76,000	170,000	182,000	90,000	12,000		270,000	260,000
YUGOSLAVIA *	1,700	1,160	16,500	14,910	2,500	410	20,700	16,480
TOTAL EASTERN EUROPE	**92,778**	**202,300**	**278,644**	**162,930**	**64,618**	**9,260**	**436,040**	**374,490**
TOTAL EUROPE	**133,073**	**285,290**	**495,853**	**230,600**	**104,297**	**38,660**	**733,223**	**554,550**

SOURCE: ITMF (International Textile Manufacturers Federation) *International Cotton Industry Statistics*, Volumes 24/1981 & 31/1988.

* ITMF estimate.

a. Approximate figures only since the breakdown of total installed loomage into cotton-system looms and other looms is difficult to establish in the U.S.A. Reported figures for total installed loomage were 255,754.

b. Filament weaving looms included.

c. The breakdown of active looms into shuttle and shuttle-less is based on the assumption that the installed active ratio has been the same for both types of looms.

d. In addition, there were approximately 7,000 powerlooms and 440,000 handlooms in the non-mill sector in 1988.

e. Data quoted are for the mill industry only. In addition, there were at the end of 1988 approximately 1.2 million power looms in the decentralized sector, of which less than 3,000 were of the shuttle-less type. Furthermore, there were approximately 4.0 million handlooms in the handloom sector. Alternatively: Total woven-cloth production in India amounted to 12,982 million meters in the year 1987-1988, of which 23% was produced in the mill sector, 50% in the decentralized powerloom sector and 27% in the handloom sector.

f. In addition, there were approximately 60,000 handlooms in the non-mill sector in 1988.

g. In addition, there were approximately 70,000 handlooms in the non-mill sector in 1988.

h. In addition, there were approximately 80,000 powerlooms in the non-mill sector in 1988.

i. Looms installed in member mills of Industrieverband Gewebe (German Weavers Association) only.

j. Substantially revised for 1988.

For 1988: The number of filament/silk weaving looms (in some cases estimated and available for certain countries only) installed at end of 1988 were as follows: Belgium 2,000; China 172,000; Finland 300; France 10,000; Germany F.R. 5,000; India 330,000 (mainly in non-mill sector); Indonesia 14,500; Italy 15,000; Japan 143,520; Korea 110,000; Mexico 14,000; Pakistan 48,000; Spain 6,000; Sweden 180; Switzerland 1,220; Taiwan 14,180; and the U.S.S.R. 20,000.

TABLE 3:
WORLDWIDE WEAVING MACHINERY *(CONTINUED)*

COUNTRY	LOOMS (75 CM OR WIDER) PRIMARILY FOR WEAVING YARN SPUN ON THE COTTON SYSTEM							
	AUTOMATIC LOOMS				NON-AUTOMATIC LOOMS		TOTAL	
	SHUTTLE-LESS		SHUTTLE					
	NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR	
	1980	1988	1980	1988	1980	1988	1980	1988
U.S.A. [bc]	**38,681**	**64,180**	**158,489**	**65,460**			**197,170** [a]	**129,640**
CANADA [b]	**400**	**2,650**	**6,850**	**8,000**			**7,250**	**10,650**
OTHER AMERICAS								
ARGENTINA	3,200	3,800	18,600	17,000	3,000		24,800	20,800
BOLIVIA		20	570	600	580	500	1,150	1,120
BRAZIL	4,500	8,500	129,300	125,000	10,000 [•]	5,000	143,800	138,500
CHILE [•]	250	520	6,900	7,000	1,350	1,000	8,500	8,520
COLOMBIA	1,200	2,300	14,000	10,400			15,200	12,700
COSTA RICA	22	70	1,108	1,000			1,130	1,070
CUBA [•,l]		1,600	6,300	5,200	200		6,500	6,800
DOMINICAN REPUBLIC	52	170	548	550			600	720
ECUADOR	350	670	3,000	3,000			3,350	3,670
EL SALVADOR	55	130	3,165	3,000	290 [•]		3,510	3,130
GUATEMALA	50	300	2,800	3,000			2,850	3,300
HAITI			547	500			547	500
JAMAICA			520	500			520	500
MEXICO [•]	10,900	10,500	40,400	33,000	900	2,000	52,200	45,500
NICARAGUA		160	1,600	850			1,600	1,010
PARAGUAY	250	50	870	750			1,120	800
PERU [•]	410	1,000	8,900	6,000	2,850		12,160	7,000
URUGUAY	200	420	1,820	1,500	300		2,320	1,920
VENEZUELA	90	2,200	6,100	6,000	400		6,590	8,200
TOTAL OTHER AMERICAS	**21,529**	**32,410**	**247,048**	**224,850**	**19,870**	**8,500**	**288,447**	**265,760**
JAPAN [c]	**14,498**	**40,000**	**104,016**	**69,540**	**179,223**	**90,450**	**297,737**	**199,990**
CHINA, PRC		**15,000**	**310,000**	**660,000**	**215,000**	**125,000**	**525,000**	**800,000**
OTHER ASIA								
BANGLADESH [d]	120	120	1,950	8,500			2,070	8,620
HONG KONG	2,420	7,270	24,450	7,080			26,870	14,350
INDIA [bce]	500	2,210	48,690	55,840	158,607	139,610	207,797	197,660
INDONESIA	2,750	8,000	41,327	85,000	44,571		88,648	93,000
KOREA, REP. OF	1,500	14,500	89,712	48,000		15,000 [•]	91,212	77,500
MALAYSIA		630	7,600	6,470			7,600	7,100
PAKISTAN [h]	470	3,500	25,508	12,350	6,000 [•]		31,978	15,850
PHILIPPINES	720	1,530	19,274	19,750			19,994	21,280
SINGAPORE	100	250	1,518	750			1,618	1,000
SRI LANKA	125	70	4,950	650	3,510	9,500	8,585	10,220
TAIWAN	8,640	27,010	39,510	47,030	8,500 [•]		56,650	74,040
THAILAND	240	2,000	52,490	60,000	6,000		58,730	62,000
TOTAL OTHER ASIA	**17,585**	**67,090**	**356,979**	**351,420**	**227,188**	**164,110**	**601,752**	**582,620**

TABLE 3:
WORLDWIDE WEAVING MACHINERY *(CONTINUED)*

	LOOMS (75 CM OR WIDER) PRIMARILY FOR WEAVING YARN SPUN ON THE COTTON SYSTEM							
	AUTOMATIC LOOMS				NON-AUTOMATIC LOOMS		TOTAL	
	SHUTTLE-LESS		SHUTTLE					
COUNTRY	NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR		NUMBER INSTALLED AT END OF YEAR	
	1980	1988	1980	1986	1980	1988	1980	1988
MIDDLE EAST, AFRICA & OCEANIA								
ALGERIA *	1,150	2,000	8,300	8,000	700	500	10,150	10,500
ANGOLA *	57	60	685	700	123	100	865	860
AUSTRALIA	540	1,000 *	2,910	100 *	519		3,969	1,100
BENIN			192	2,000			192	2,000
BOTSWANA		120					0	120
BURKINA FASO				200			0	200
BURMA	30	30	2,600	2,500	2,240 *	2,000	4,870	4,530
C.A. REPUBLIC			456	500			456	500
CAMEROON	28	200	1,200	1,000			1,228	1,200
CHAD			285	280			285	280
CONGO			204	190			204	190
EGYPT	450	3,600	31,850	35,000	8,000 *	20,000	40,300	58,600
ETHIOPIA *	60	300	2,200	1,500	420	1,500	2,680	3,300
GHANA	32	30	3,606	3,610			3,638	3,640
GUINEA				180			0	180
IRAN	1,150	3,500	18,400	19,000	3,500	3,000	23,050	25,500
IRAQ	1,230	350	6,563	3,850			7,793	4,200
ISRAEL	460	1,100	3,000	3,000	1,000 *	500	4,460	4,600
IVORY COAST	153	630	2,650	2,000			2,803	2,630
KENYA	124	220	1,396	1,750	280		1,800	1,970
LEBANON	50	50	1,600	1,600	300*	300	1,950	1,950
LIBYA		400		2,600			0	3,000
MADAGASCAR	45	200	1,143	1,230	740*	500	1,928	1,930
MALAWI		70	600	600			600	670
MALI			1,120	1,120			1,120	1,120
MOROCCO	290	1,150	3,209	4,400	789		4,288	5,550
MOZAMBIQUE		20	2,427	2,430			2,427	2,450
NEPAL #		60		1,000			0	1,060
NIGER			278	280			278	280
NIGERIA	1,500	2,250	9,030	15,000	3,000	2,000	13,530	19,250
SENEGAL	12	150	768	500			780	650
SOMALIA	154	150	281	280			435	430
SOUTH AFRICA	1,900	1,900	5,300	2,400	530	1,600	7,730	5,900
SUDAN			8,462	10,000	850		9,312	10,000
SWAZILAND		40					0	40
SYRIA	286	1,500	3,114	1,000			3,400	2,500
TANZANIA	40	150	3,503	5,000	623		4,166	5,150
TOGO *			650				650	0
TUNISIA	380	1,080	1,940	3,700			2,320	4,780
UGANDA	240	240	1,640 *	1,240	300 *		2,180 *	1,480
UPPER VOLTA			200				200	0
ZAIRE		90	2,618	2,700			2,618	2,790
ZAMBIA	12	140	481	1,000			493	1,140
ZIMBABWE		350		1,500		100	0	1,950
TOTAL M.E., A. & O.	**10,373**	**23,130**	**134,861**	**144,940**	**23,914**	**32,100**	**169,148**	**200,170**
TOTAL WORLD	**236,139**	**529,750**	**1,814,096**	**1,754,810**	**769,492**	**458,820**	**2,819,727**	**2,743,380**

TABLE 4:
AUTOMATIC SHUTTLE-LESS LOOMS IN DEVELOPED AND DEVELOPING COUNTRIES
PERCENT

	1980	1988
DEVELOPED COUNTRIES:	79.0	74.1
WESTERN EUROPE	17.1	15.7
EASTERN EUROPE	39.3	38.2
USA/CANADA	16.5	12.6
JAPAN	6.1	7.6
DEVELOPING COUNTRIES:	21.0	25.9
OTHER AMERICAS	9.1	6.1
CHINA, PRC	0	2.8
OTHER ASIA	7.4	12.7
M.E., A. & O.	4.5	4.3

SOURCE: ITMF (International Textile Manufacturers Federation) *International Cotton Industry Statistics*, Volumes 24/1981 & 31/1988.

GRAPH 3:
COMPARISON OF AUTOMATIC SHUTTLE-LESS LOOMS IN DEVELOPED AND DEVELOPING COUNTRIES

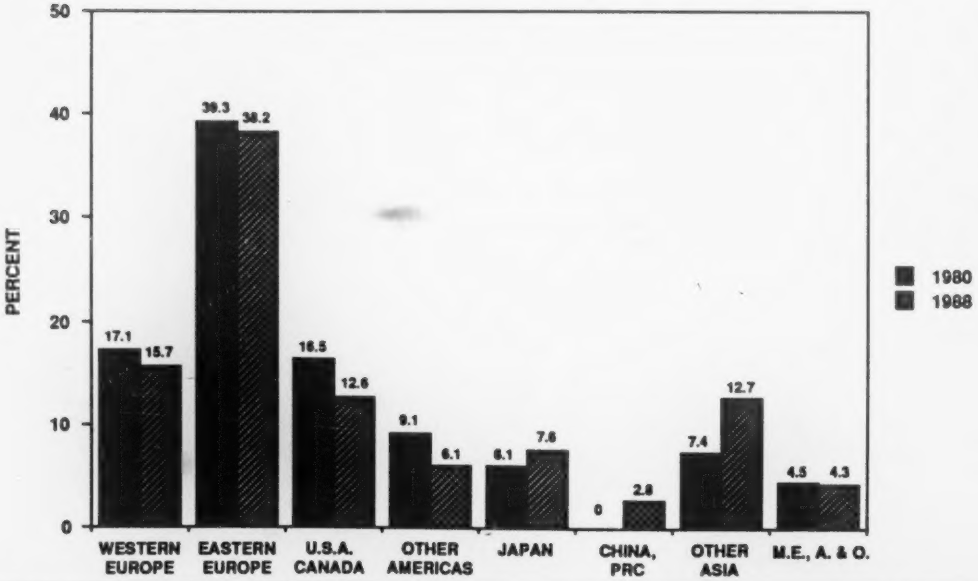

TABLE 5:
AUTOMATIC SHUTTLE LOOMS IN DEVELOPED AND DEVELOPING COUNTRIES
PERCENT

	1980	1988
DEVELOPED COUNTRIES:	**46.5**	**33.5**
WESTERN EUROPE	12.6	6.6
EASTERN EUROPE	18.1	16.0
USA/CANADA	10.0	6.1
JAPAN	5.8	4.8
DEVELOPING COUNTRIES:	**53.5**	**66.5**
OTHER AMERICAS	13.1	11.3
CHINA, PRC	15.1	29.5
OTHER ASIA	18.3	18.3
M.E., A. & O.	7.0	7.4

SOURCE: ITMF (International Textile Manufacturers Federation) *International Cotton Industry Statistics*, Volumes 24/1981 & 31/1988.

GRAPH 4:
COMPARISON OF AUTOMATIC SHUTTLE LOOMS IN DEVELOPED AND DEVELOPING COUNTRIES

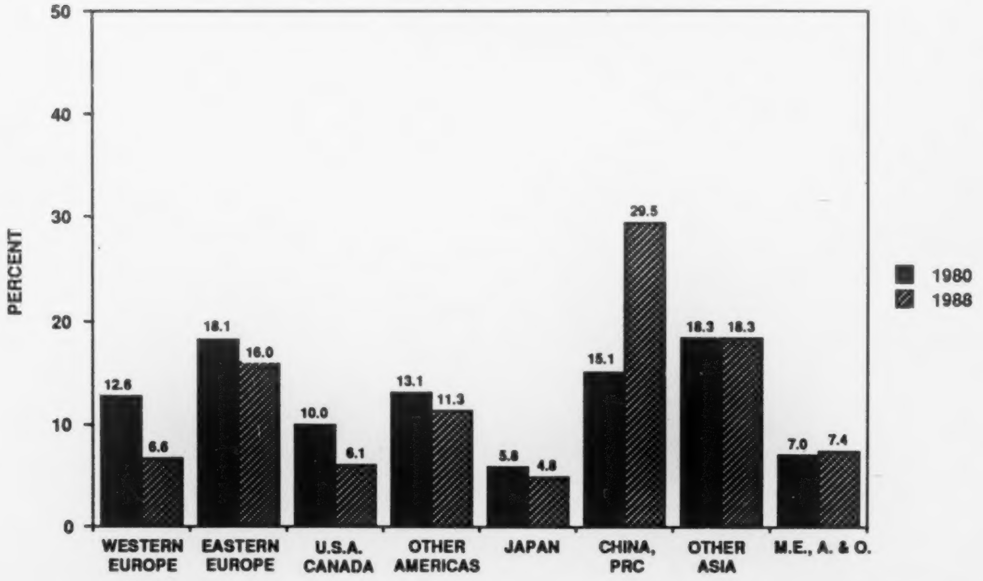

TABLE 6:
NON-AUTOMATIC LOOMS IN DEVELOPED AND DEVELOPING COUNTRIES
PERCENT

	1980	1988
DEVELOPED COUNTRIES:	36.9	28.1
WESTERN EUROPE	5.2	6.4
EASTERN EUROPE	8.4	2.0
JAPAN	23.3	19.7
DEVELOPING COUNTRIES:	63.1	71.9
OTHER AMERICAS	2.6	1.9
CHINA, PRC	27.9	27.2
OTHER ASIA	29.5	35.8
M.E., A. & O.	3.1	7.0

SOURCE: ITMF (International Textile Manufacturers Federation) *International Cotton Industry Statistics*, Volumes 24/1981 & 31/1988.

GRAPH 5:
COMPARISON OF NON-AUTOMATIC LOOMS IN DEVELOPED AND DEVELOPING COUNTRIES

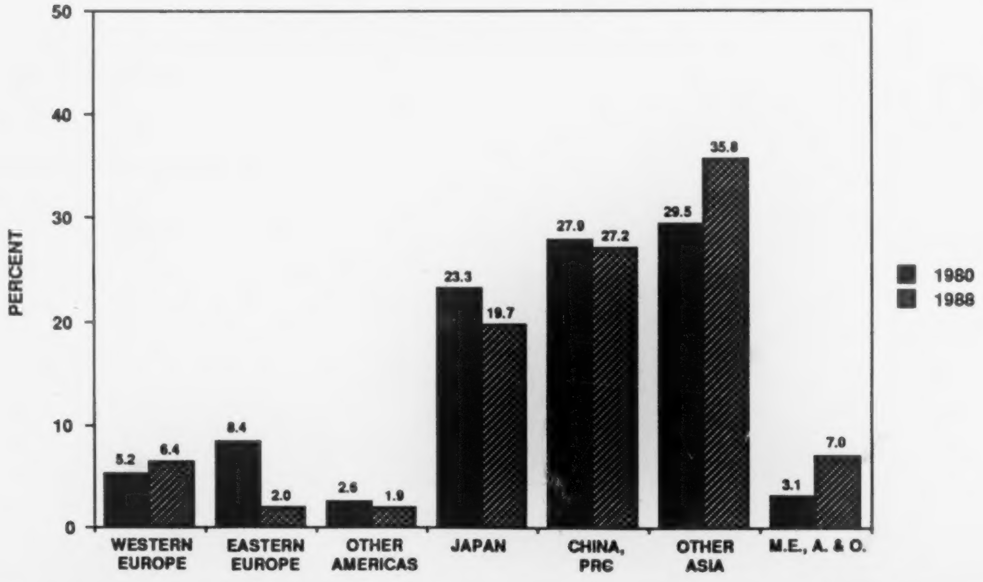

TABLE 7:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3	1	89	68	83							311	11
BRAZIL	26	53	53	74	165	107							478	426
CANADA	628	303	171	405	377	432							2316	3869
CHILE	0	309	66	44	287	44							750	176
GERMANY, FED. REP. OF	422	516	844	684	783	506							3755	3335
IRELAND	145	0	36	35	34	36							286	281
JAPAN	104	72	111	104	170	164							725	834
KOREA, REP. OF	0	22	33	22	29	0							106	166
MEXICO	102	4	121	78	100	116							521	768
NETHERLANDS	282	264	345	178	275	483							1827	1318
UNITED KINGDOM	34	22	60	0	38	52							206	556
ALL OTHER COUNTRIES [a]	21	56	22	49	25	42							215	374
TOTAL ARTIFICIAL YARN	1831	1624	1863	1762	2351	2065							11496	12114
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493	108	1254	910	2497							5581	2159
CANADA	4973	3854	4391	4333	4128	4049							25728	20081
GERMANY, FED. REP. OF	89	134	257	322	347	243							1392	812
JAPAN	143	204	126	131	238	69							911	1523
POLAND	[illegible]	171	43	46	0	109							493	152
SWEDEN	118	71	49	72	0	4							314	76
SWITZERLAND	0	27	0	14	0	0							41	217
TAIWAN	354	988	1323	964	1732	1242							6603	464
UNITED KINGDOM	89	93	73	37	162	46							500	649
ALL OTHER COUNTRIES [b]	95	59	91	18	32	866							1161	2438
TOTAL ARTIFICIAL STAPLE+TOW	6304	6094	6461	7191	7549	9125							42724	28371
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0	43	34	9	0							86	125
BELGIUM	776	122	589	594	1384	786							4251	921
BRAZIL	70	71	57	180	118	76							572	710
CANADA	3834	2895	4150	3775	4492	3853							22999	18362
COSTA RICA	762	517	497	462	787	470							3495	2895
ECUADOR	53	16	67	67	75	34							312	342
FRANCE	2007	1305	1065	1378	1223	1302							8280	6813
GERMANY, FED. REP. OF	2096	2021	1480	1546	2024	1917							11084	15638
ITALY	892	434	593	905	861	313							3998	4142
JAPAN	760	658	505	573	356	622							3474	3306
KOREA, REP. OF	31	0	90	20	46	42							229	287
MEXICO	1393	900	1607	1396	1145	1967							8408	13349
NETHERLANDS	103	305	921	219	117	195							1860	998
PORTUGAL	62	234	49	42	62	0							449	304
SINGAPORE	16	16	0	0	33	0							65	91
TAIWAN	791	227	114	818	437	959							3346	8232
THAILAND	58	93	95	123	64	65							498	499
UNITED KINGDOM	1881	1492	2076	1029	1282	1718							9478	9193
ALL OTHER COUNTRIES [c]	351	85	147	79	79	91							832	2151
TOTAL SYNTHETIC YARN	15936	11391	14145	13240	14594	14410							83716	88158
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53	11	11	6	14							95	26
AUSTRALIA	38	120	30	72	63	106							429	333
BELGIUM	1	16	0	158	0	78							253	336
CANADA	3703	2439	3082	2325	2156	1402							15107	7286
FRANCE	592	297	769	436	558	364							3016	1916
GERMANY, FED. REP. OF	1017	1236	1063	1205	1618	1398							7537	9625
INDIA	1731	1055	4215	0	2528	1752							11281	7930
IRELAND	0	26	0	0	0	84							110	1449
ITALY	422	318	534	204	206	176							1860	1223
JAPAN	1754	1763	2307	1539	1531	1874							10768	12858
KOREA, REP. OF	1786	1273	1778	2043	3441	4750							15071	24345
MEXICO	3590	2041	2015	2355	3385	1382							14768	4102
NETHERLANDS	1	0	57	20	10	20							108	475
SPAIN	35	0	0	0	0	93							128	418
SWITZERLAND	399	124	87	385	107	280							1382	778
TAIWAN	888	572	931	1400	1476	1215							6482	4494
TURKEY	112	114	0	0	0	0							226	166
UNITED KINGDOM	2249	1868	2834	2159	2242	1157							12509	12272
ALL OTHER COUNTRIES [d]	549	326	137	92	219	1362							2685	213
TOTAL SYNTHETIC STAPLE+TOW	18867	13641	19850	14404	19546	17507							103815	90245

a. Italy 54, India 34, Ecuador 33, France 30, Taiwan 22, Uruguay 13, Belgium 12, Turkey 12, Thailand 4, Hong Kong 1.

b. Finland 480, Thailand 330, Yugoslavia 157, France 72, Italy 71, Netherlands 44, Brazil 7.

c. Spain 194, Ireland 121, Turkey 84, Paraguay 83, Switzerland 83, El Salvador 60, Morocco 47, Sweden 43, Hong Kong 40, Austria 24, Finland 22, Yugoslavia 8, Haiti 6, Colombia 5, Honduras 5, Greece 3, Australia 2, Dominican Republic 2.

d. Brazil 1402, Venezuela 395, China, PRC 224, Thailand 209, Sweden 180, Malaysia 88, Hong Kong 64, Denmark 47, Poland 47, Romania 29.

TABLE 8:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

	1990												YEAR TO DATE	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208	240	163	110	92							1055	1296
TEXTURED	54	8	0	33	32	81							208	232
OTHER	1385	1371	1471	1528	2171	1855							9781	10069
MONOFILAMENTS & STRIPS	150	37	152	38	38	37							452	517
SUBTOTAL ABOVE	**1831**	**1624**	**1863**	**1762**	**2351**	**2065**							**11496**	**12114**
STAPLE	5989	5884	6154	6846	7218	8895							40986	28163
TOW	312	210	307	342	331	230							1732	157
TOPS	3	0	0	3	0	0							6	51
SUBTOTAL ABOVE	**6304**	**6094**	**6461**	**7191**	**7549**	**9125**							**42724**	**28371**
WASTE	**0**	**0**	**0**	**22**	**0**	**88**							**110**	**400**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856	1437	1000	1336	1220							7284	9007
TEXTURED														
UP TO 450 DENIER	270	333	253	338	520	212							1926	1880
OVER 450 DENIER	2936	1350	2132	3039	3721	3074							16252	6982
OTHER	4531	3817	4273	2090	2435	3285							20431	24263
MONOFILAMENTS & STRIPS	216	117	148	191	134	164							970	661
SUBTOTAL ABOVE	**9388**	**6473**	**8243**	**6658**	**8146**	**7955**							**46863**	**42793**
POLYESTER														
HIGH TENACITY	614	408	506	421	345	457							2751	4734
TEXTURED	785	643	626	923	581	1368							4926	10220
POY	719	119	117	758	251	716							2680	7728
OTHER	2038	1457	1459	1683	1949	1300							9886	8983
MONOFILAMENTS & STRIPS	53	0	67	40	53	38							251	328
SUBTOTAL ABOVE	**4209**	**2627**	**2775**	**3825**	**3179**	**3879**							**20494**	**31993**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408	2224	1880	2281	1847							11091	9975
OTHER	277	223	301	276	307	324							1708	1567
MONOFILAMENTS & STRIPS	611	660	602	601	681	405							3560	1830
SUBTOTAL ABOVE	**2339**	**2291**	**3127**	**2757**	**3269**	**2576**							**16359**	**13372**
STAPLE														
NYLON	4048	3037	4055	3032	3267	2179							19618	9754
POLYESTER	9261	5813	9622	6652	12118	11296							54762	50853
ACRYLIC	1711	1729	2063	1586	860	1458							9407	8773
POLYPROPYLENE	543	37	160	27	105	90							962	960
OTHER	196	190	320	146	151	362							1365	2935
TOW														
NYLON	409	308	555	385	603	471							2731	2067
POLYESTER	15	70	70	2	26	174							357	559
ACRYLIC	2512	1973	2649	2252	2133	1350							12869	11711
OTHER	70	5	35	105	135	0							350	397
TOPS	102	479	321	217	148	127							1394	2216
SUBTOTAL ABOVE	**18867**	**13641**	**19850**	**14404**	**19546**	**17507**							**103815**	**90245**
WASTE														
NYLON	2694	2074	1628	1933	1267	1940							11536	11592
POLYESTER	2703	2241	1882	1067	3127	2128							13148	4917
OTHER	444	571	1027	602	838	876							4358	3020
TOTAL MANUFACTURED FIBERS ABOVE	**48779**	**37636**	**46856**	**40221**	**49272**	**48139**							**270903**	**238817**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59	54	62	59	121							470	532
SPUN YARN	427	503	318	594	534	436							2812	2389
SPUN YARNS														
SYNTHETIC	2420	2155	2639	1902	2841	2270							14227	28493
ARTIFICIAL	0	0	0	0	0	0							0	0
PUT UP FOR RETAIL SALE	32	24	70	34	87	88							335	268
GRAND TOTAL ABOVE	**51773**	**40377**	**49937**	**42813**	**52793**	**51054**							**288747**	**270499**

SOURCE: U.S. Census Bureau Report IM145X.

TABLE 9:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37	44	6	45	157							381	139
TEXTURED	217	9	30	284	101	114							755	567
OTHER	66	106	57	64	46	18							357	871
MONOFILAMENTS & STRIPS	97	0	15	11	26	3							152	204
SUBTOTAL ABOVE	**472**	**152**	**146**	**365**	**218**	**292**							**1645**	**1781**
STAPLE	1195	2051	1838	1329	1645	1171							9229	10303
TOPS	333	0	203	187	185	58							966	332
SUBTOTAL ABOVE	**1528**	**2051**	**2041**	**1516**	**1830**	**1229**							**10195**	**10635**
WASTE	**330**	**407**	**614**	**547**	**603**	**587**							**3088**	**7308**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357	9332	8892	15463	10230							59031	56564
TEXTURED														
UP TO 450 DENIER	1571	588	626	2098	791	751							6425	4583
OVER 450 DENIER	5636	4353	5225	4130	3350	4019							26713	27368
OTHER	2637	2264	3143	2401	2191	2066							14702	13036
MONOFILAMENTS & STRIPS	8	32	93	33	42	35							243	1322
SUBTOTAL ABOVE	**17609**	**14594**	**18419**	**17554**	**21837**	**17101**							**107114**	**102873**
POLYESTER														
HIGH TENACITY	4308	5166	5459	4737	3944	4664							28278	20502
TEXTURED	3074	3021	4078	3508	3650	4310							21641	19437
POY	1831	2368	1287	1783	2918	1306							11493	6996
OTHER	1297	1746	1824	1275	2294	1566							10002	5366
MONOFILAMENTS & STRIPS	185	285	91	93	188	186							1028	1390
SUBTOTAL ABOVE	**10695**	**12586**	**12739**	**11396**	**12994**	**12032**							**72442**	**53691**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523	549	801	424	434							3266	4891
OTHER	2035	2007	2279	2972	4061	1909							15263	9169
MONOFILAMENTS & STRIPS	876	913	1664	1218	1223	1230							7124	4909
SUBTOTAL ABOVE	**3446**	**3443**	**4492**	**4991**	**5708**	**3573**							**25653**	**18969**
STAPLE														
NYLON	3163	2765	2343	3257	2210	1729							15467	19026
POLYESTER	7157	6405	9490	7701	8861	6382							45996	68845
ACRYLIC	4584	3178	3882	3936	4697	6363							26640	38250
POLYPROPYLENE	2038	1561	2666	3226	2211	2805							14507	11489
OTHER	2688	923	1504	961	1818	1062							8956	10414
TOW														
NYLON	121	176	155	304	145	191							1092	486
POLYESTER	18	64	0	100	6	52							240	2335
ACRYLIC	1710	1787	989	956	1245	1506							8193	10581
OTHER	26	12	15	243	0	679							975	730
TOPS	3984	2729	2309	4760	2552	4741							21075	9548
SUBTOTAL ABOVE	**25489**	**19600**	**23353**	**25444**	**23745**	**25510**							**143141**	**171684**
WASTE														
NYLON	4117	4250	3894	2746	3957	3139							22103	13396
POLYESTER	3268	2845	2782	3321	2596	1833							16645	23484
OTHER	3343	3700	4979	4352	4994	6193							27561	39828
TOTAL MANUFACTURED FIBERS ABOVE	**70297**	**63628**	**73459**	**72232**	**78482**	**71489**							**429587**	**443649**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	28	45	32	25	68	13							211	283
SPUN YARN	0	0	0	0	0	0							0	0
SPUN YARNS														
SYNTHETIC	3007	4304	3749	4278	4103	3890							23331	17588
ARTIFICIAL	0	0	0	0	0	0							0	0
PUT UP FOR RETAIL SALE	287	398	641	746	789	715							3576	3816
GRAND TOTAL ABOVE	**73619**	**68375**	**77881**	**77281**	**83442**	**76107**							**456706**	**465334**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 10:
QUARTERLY MANUFACTURED FIBER DATA

MILLION POUNDS

	1988					1989					1990				
ITEM	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
						YARN+MONOFILAMENTS									
ARTIFICIAL (CELLULOSIC) YARN [d]															
PRODUCTION	49.1	54.4	54.9	55.5	213.9	52.7	55.8	56.7	52.3	217.5	46.8	52.3			
SHIPMENTS - DOMESTIC	41.4	47.3	45.8	48.1	182.6	46.0	50.3	45.6	45.4	187.3	40.1	43.3			
- EXPORT	8.7	7.9	10.0	7.5	34.1	6.8	7.9	8.4	8.6	31.7	7.8	9.1			
TOTAL SHIPMENTS	50.1	55.2	55.8	55.6	216.7	52.8	58.2	54.0	54.0	219.0	47.9	52.4			
ENDING STOCK	13.2	12.4	11.5	11.4		11.3	8.9	11.6	9.9		8.8	8.7			
IMPORTS	4.0	4.0	4.4	5.2	17.6	6.3	5.9	1.3	6.8	26.3	5.3	6.2			
TOTAL AVAILABLE	45.4	51.3	50.2	53.3	200.2	52.3	56.2	52.9	52.2	213.6	45.4	49.5			
NYLON															
PRODUCTION	431.7	440.0	428.8	427.0	1727.5	436.9	447.5	434.8	440.0	1759.2	428.3	438.1			
SHIPMENTS - DOMESTIC	387.8	395.4	391.1	398.1	1572.4	387.9	399.7	400.9	386.8	1575.3	382.5	383.2			
- EXPORT	39.6	38.1	41.5	46.8	166.0	42.7	38.9	34.8	40.4	156.8	37.9	38.4			
TOTAL SHIPMENTS	427.4	433.5	432.6	444.9	1738.4	430.6	438.6	435.7	427.2	1732.1	420.4	421.6			
ENDING STOCK	140.5	147.0	143.2	125.3		131.6	140.5	139.6	152.4		160.3	176.8			
OLEFIN [a]															
PRODUCTION	307.6	313.8	296.6	306.1	1224.1	313.8	324.6	310.4	308.4	1257.2	340.3	370.1			
SHIPMENTS - DOMESTIC	303.5	307.7	288.8	299.8	1199.8	308.0	315.5	301.6	300.9	1226.0	335.8	365.4			
- EXPORT	2.7	5.9	6.0	5.2	19.8	5.2	6.4	7.2	3.7	22.5	4.6	5.5			
TOTAL SHIPMENTS	306.2	313.6	294.8	305.0	1219.6	313.2	321.9	308.8	304.6	1248.5	340.4	370.9			
ENDING STOCK	54.3	54.5	56.3	57.4		58.0	60.7	62.3	66.1		66.0	65.2			
POLYESTER															
PRODUCTION	284.5	313.5	304.6	326.2	1228.8	314.4	325.3	306.4	262.9	1209.0	262.1	280.0			
SHIPMENTS - DOMESTIC	266.7	291.9	278.2	320.6	1157.4	292.0	303.6	264.1	251.0	1110.7	241.7	271.9			
- EXPORT	18.8	17.8	16.7	21.4	74.7	16.0	13.1	13.3	16.2	58.6	16.7	20.9			
TOTAL SHIPMENTS	285.5	309.7	294.9	342.0	1232.1	308.0	316.7	277.4	267.2	1169.3	258.4	292.8			
ENDING STOCK	108.3	112.1	121.8	106.0		112.4	121.0	150.0	145.7		149.4	136.6			
TOTAL SYNTHETIC (NONCELLULOSIC) ABOVE															
PRODUCTION	1023.8	1067.3	1030.0	1059.3	4180.4	1065.1	1097.4	1051.6	1011.3	4225.4	1030.7	1088.2			
SHIPMENTS - DOMESTIC	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	966.6	938.7	3912.0	960.0	1020.5			
- EXPORT	61.1	61.8	64.2	73.4	260.5	63.9	58.4	55.3	60.3	237.9	59.2	64.8			
SHIPMENTS	1019.1	1056.8	1022.3	1091.9	4190.1	1051.8	1077.2	1021.9	999.0	4149.9	1019.2	1085.3			
ENDING STOCK	303.1	313.6	321.3	288.7		302.0	322.2	351.9	364.2		375.7	378.6			
DOMESTIC SHIPMENTS	958.0	995.0	958.1	1018.5	3929.6	987.9	1018.8	966.6	938.7	3912.0	960.0	1020.5			
IMPORTS -TEXTURED YARN [b]	15.7	14.7	16.1	14.1	60.6	14.4	14.7	15.0	11.8	55.9	14.4	19.8			
-OTHER YARN [b]	11.2	11.1	11.9	13.4	47.6	23.3	33.0	32.5	28.6	117.4	24.6	20.2			
-MONOFILAMENTS	1.8	2.3	2.0	2.0	8.1	1.2	1.6	4.0	2.1	8.9	2.5	2.3			
TOTAL IMPORTS	28.7	28.1	30.0	29.5	116.3	38.9	49.3	51.5	42.5	182.2	41.5	42.3			
TOTAL AVAILABLE	986.7	1023.1	988.1	1048.0	4045.9	1026.8	1068.1	1018.1	981.2	4094.2	1001.5	1062.8			
						GLASS FIBER									
TOTAL SHIPMENTS	386.4	415.2	405.9	380.2	1567.7	394.2	399.3	363.4	373.2	1530.1	393.2	414.6			

FOOTNOTES FOR TABLE ABOVE & OPPOSITE:

"Imports" are imports for consumption, as reported by the U.S. Census Bureau.

- **a.** Also include film fiber as well as spunbonded polypropylene.
- **b.** Includes singles and plied.
- **c.** For 1988, these figures are composites of the nylon, acrylic+modacrylic and polyester staple imports, i.e., Commodity Numbers 309.4331, .4351, .4336 & .4361. For 1989-1990 Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon.***
- **d.** Includes both rayon & acetate yarn.
- **e.** For 1988, these figures are composites of olefin and other staple imports, i.e., Commodity Numbers 309.4371, .4341 & .4390. For 1989-1990, Harmonized Tariff Schedule numbers, please see pages 73-79 of the April 1989 ***Fiber Organon.***

TABLE 10:
QUARTERLY MANUFACTURED FIBER DATA *(Continued)*

MILLION POUNDS

ITEM	1988					1989					1990				
	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR	1ST Q	2ND Q	3RD Q	4TH Q	YEAR
						STAPLE+TOW									
RAYON															
PRODUCTION	106.6	101.2	99.4	92.6	399.8	100.8	101.2	83.2	77.6	362.8	73.3	72.0			
SHIPMENTS -DOMESTIC	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6	70.2	338.2	77.6	71.6			
-EXPORT	5.1	6.1	5.5	3.8	20.5	3.4	5.4	4.3	3.1	16.2	4.1	4.3			
TOTAL SHIPMENTS	107.0	108.1	99.5	91.9	406.5	103.1	97.1	80.9	73.3	354.4	81.7	75.9			
ENDING STOCK	20.3	13.4	13.3	14.0		11.7	15.8	18.1	22.4		14.0	10.1			
DOMESTIC SHIPMENTS	101.9	102.0	94.0	88.1	386.0	99.7	91.7	76.6	70.2	338.2	77.6	71.6			
IMPORTS FOR CONSUMPTION															
STAPLE	3.2	3.8	5.5	6.5	19.0	} 15.1	13.3	12.4	13.2	54.0	18.9	23.9			
GROUPED FILAMENTS	0.2	0.3	0.5	0.4	1.4										
TOTAL IMPORTS	3.4	4.1	6.0	6.9	20.4	15.1	13.3	12.4	13.2	54.0	18.9	23.9			
TOTAL AVAILABLE	105.3	106.1	100.0	95.0	406.4	114.8	105.0	89.0	83.4	392.2	96.5	95.5			
NYLON															
PRODUCTION	231.5	235.9	226.6	247.8	941.8	252.9	242.0	241.0	244.8	980.7	237.0	273.0			
SHIPMENTS -DOMESTIC	239.4	223.9	241.6	240.0	944.9	242.0	231.2	245.8	236.3	955.3	242.6	243.1			
-EXPORT	4.3	4.3	4.9	5.5	19.0	7.5	4.8	5.4	5.5	23.2	7.1	6.5			
TOTAL SHIPMENTS	243.7	228.2	246.5	245.5	963.9	249.5	236.0	251.2	241.8	978.5	249.7	249.6			
ENDING STOCK	57.5	65.2	45.3	47.6		51.0	57.0	46.8	49.8		37.1	60.5			
IMPORTS	4.9	5.1	5.4	6.5	21.9	6.4	5.4	5.4	8.9	26.1	12.4	9.9			
TOTAL AVAILABLE	244.3	229.0	247.0	246.5	966.8	248.4	236.6	251.2	245.2	981.4	255.0	253.0			
ACRYLIC+MODACRYLIC															
PRODUCTION	148.8	150.9	141.5	146.9	588.1	144.3	145.6	129.4	123.4	542.7	129.6	136.9			
SHIPMENTS -DOMESTIC	109.0	109.3	107.3	95.5	421.1	112.9	112.4	102.8	86.7	414.8	98.8	94.0			
-EXPORT	47.7	29.1	39.8	52.5	169.1	23.6	32.5	30.0	36.5	122.6	24.5	32.5			
TOTAL SHIPMENTS	156.7	138.4	147.1	148.0	590.2	136.5	144.9	132.8	123.2	537.4	123.3	126.5			
ENDING STOCK	55.4	67.9	62.3	61.2		69.0	69.7	66.3	66.5		72.8	83.2			
IMPORTS	3.3	4.4	3.3	4.3	15.3	9.4	11.1	8.5	8.5	37.5	12.6	9.6			
TOTAL AVAILABLE	112.3	113.7	110.6	99.8	436.4	122.3	123.5	111.3	95.2	452.3	111.4	103.6			
OLEFIN															
PRODUCTION	94.3	94.5	85.9	89.3	364.0	97.1	97.7	92.0	94.8	381.6	96.9	105.3			
SHIPMENTS -DOMESTIC	83.8	87.6	84.8	88.0	344.2	91.6	93.5	91.4	86.9	363.4	94.0	101.9			
-EXPORT	5.6	5.8	4.4	3.8	19.6	3.1	3.7	3.4	3.8	14.0	6.0	6.3			
TOTAL SHIPMENTS	89.4	93.4	89.2	91.8	363.8	94.7	97.2	94.8	90.7	377.4	100.0	108.2			
ENDING STOCK	35.0	36.1	32.8	30.3		32.8	33.3	30.5	34.6		31.5	28.6			
POLYESTER															
PRODUCTION	587.4	619.5	604.3	640.6	2451.8	609.4	648.8	591.0	536.1	2385.3	520.8	545.6			
SHIPMENTS -DOMESTIC	558.3	572.5	551.2	629.8	2311.8	575.4	594.6	543.0	548.3	2261.3	502.5	510.9			
-EXPORT	27.8	31.1	38.2	40.0	137.1	34.9	21.7	20.1	16.8	93.5	15.3	15.2			
TOTAL SHIPMENTS	586.1	603.6	589.4	669.8	2448.9	610.3	616.3	563.1	565.1	2354.8	517.8	526.1			
ENDING STOCK	157.8	173.7	188.6	159.4		158.5	191.0	218.9	189.9		192.9	212.4			
IMPORTS	15.0	20.7	22.3	15.2	73.2	21.5	29.9	34.5	32.7	118.6	24.9	30.3			
TOTAL AVAILABLE	573.3	593.2	573.5	645.0	2385.0	596.9	624.5	577.5	581.0	2379.9	527.4	541.2			
TOTAL SYNTHETIC (NONCELLULOSIC)															
PRODUCTION	1062.0	1100.8	1058.3	1124.6	4345.7	1103.7	1134.1	1053.4	999.1	4290.3	984.3	1060.8			
SHIPMENTS -DOMESTIC	990.5	993.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0	958.2	3994.8	937.9	949.9			
-EXPORT	85.4	70.3	87.3	101.8	344.8	69.1	62.7	58.9	62.6	253.3	52.9	60.5			
TOTAL SHIPMENTS	1075.9	1063.6	1072.2	1155.1	4366.8	1091.0	1094.4	1041.9	1020.8	4248.1	990.8	1010.4			
ENDING STOCK	305.7	342.9	329.0	298.5		311.3	351.0	362.5	340.8		334.3	384.7			
DOMESTIC SHIPMENTS	990.5	933.3	984.9	1053.3	4022.0	1021.9	1031.7	983.0	958.2	3994.8	937.9	949.9			
IMPORTS FOR CONSUMPTION															
3 FIBERS ABOVE [c]	23.2	30.2	31.0	26.0	110.4	37.3	46.4	48.4	50.1	182.2	49.9	49.8			
OTHER N.C. STAPLE [e]	5.6	5.7	4.3	4.2	19.8	} 3.7	2.8	1.7	2.0	10.2	2.5	1.7			
GROUPED FILAMENTS	14.5	17.8	15.7	17.6	65.8										
TOTAL IMPORTS	43.3	53.7	51.0	48.0	196.0	41.0	49.2	50.1	52.1	192.4	52.4	51.5			
TOTAL AVAILABLE	1033.8	1047.0	1035.9	1101.3	4218.0	1062.9	1080.9	1033.1	1010.3	4187.2	990.3	1001.4			

See footnotes on opposite page.

TABLE 11:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

	1990												YEAR TO DATE[a]	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4	18.1	17.4	16.9	19.1						119.4	129.9
RAYON STAPLE	30.1	25.3	26.3	28.2	25.1	22.6	24.8						182.4	225.0
TOTAL ARTIFICIAL (CELLULOSIC)	**45.2**	**40.7**	**43.7**	**46.3**	**42.5**	**39.5**	**43.9**						**301.8**	**354.9**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4	28.4	28.8	27.6	24.9						193.3	217.4
- CARPET	86.5	81.1	82.2	85.6	80.1	75.8	71.8						563.1	549.6
- TEXTILE[f]	28.9	28.2	29.9	32.0	32.0	31.3	29.0						211.3	236.5
POLYESTER - INDUSTRIAL[d]	27.2	28.6	31.8	32.9	30.1	30.2	28.2						209.0	214.4
- TEXTILE[f]	56.6	56.2	58.0	69.8	68.4	61.4	59.7						430.1	512.6
OLEFIN[e]	107.2	116.5	116.7	124.2	124.5	122.2	117.4						828.7	729.9
TOTAL YARN	**331.3**	**340.9**	**347.0**	**372.9**	**363.9**	**348.5**	**331.0**						**2435.5**	**2460.4**
STAPLE+TOW+FIBERFILL														
NYLON	88.8	74.9	86.0	85.0	87.0	77.6	72.2						571.5	560.4
ACRYLIC+MODACRYLIC	40.4	39.7	43.2	39.7	43.0	43.8	38.6						288.4	322.5
POLYESTER	168.9	175.7	173.2	182.2	176.3	167.6	156.7						1200.6	1408.9
OLEFIN	30.3	34.4	35.3	35.1	36.0	37.1	31.4						239.6	219.7
TOTAL STAPLE	**328.4**	**324.7**	**337.7**	**342.0**	**342.3**	**326.1**	**298.9**						**2300.1**	**2511.5**
TOTAL SYNTHETIC (NONCELLULOSIC)	**659.7**	**665.6**	**684.7**	**714.9**	**706.2**	**674.6**	**629.9**						**4735.6**	**4971.9**
TOTAL MANUFACTURED FIBER	**704.9**	**706.3**	**728.4**	**761.2**	**748.7**	**714.1**	**673.8**						**5037.4**	**5326.8**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8	9.1	7.6	8.7	8.9						8.9	11.0
RAYON STAPLE	20.2	17.2	14.0	14.2	11.9	10.1	12.4						12.4	16.8
TOTAL ARTIFICIAL (CELLULOSIC)	**29.9**	**27.1**	**22.8**	**23.3**	**19.5**	**18.8**	**21.3**						**21.3**	**27.8**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4	36.0	30.1	35.7	42.2						42.2	26.7
- CARPET	60.5	61.2	62.6	63.2	65.4	78.2	82.3						82.3	73.6
- TEXTILE[f]	57.0	59.9	64.3	63.5	63.5	62.9	62.1						62.1	52.7
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5	39.2	37.9	35.8	35.6						35.6	33.9
- TEXTILE[f]	94.5	104.9	109.9	106.4	99.7	100.8	100.1						100.1	99.7
OLEFIN[e]	68.1	66.6	66.0	63.9	63.8	65.2	63.6						63.6	61.1
TOTAL YARN	**356.2**	**366.9**	**375.7**	**372.2**	**360.4**	**378.6**	**385.9**						**385.9**	**347.7**
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1	44.3	47.7	60.5	65.3						65.3	59.1
ACRYLIC+MODACRYLIC	69.5	70.9	72.8	75.3	78.9	83.2	87.0						87.0	71.7
POLYESTER	193.5	195.1	192.9	217.4	210.8	212.4	216.8						216.8	226.5
OLEFIN	34.6	33.4	31.5	29.8	28.5	28.6	29.8						29.8	34.2
TOTAL STAPLE	**337.7**	**339.9**	**334.3**	**366.8**	**365.9**	**384.7**	**398.9**						**398.9**	**391.5**
TOTAL SYNTHETIC (NONCELLULOSIC)	**693.9**	**706.8**	**710.0**	**739.0**	**726.3**	**763.3**	**784.8**						**784.8**	**739.2**
TOTAL MANUFACTURED FIBER	**723.8**	**733.9**	**732.8**	**762.3**	**745.8**	**782.1**	**806.1**						**806.1**	**767.0**
	COTTON CONSUMPTION													
RAW COTTON	317.3	332.1	365.9	327.8	340.0	379.3							2062.4	1963.1
	WOOL CONSUMPTION[g]													
	1ST QUARTER			2ND QUARTER			3RD QUARTER			4TH QUARTER				
APPAREL CLASS WOOL	29.9												29.9	35.8
CARPET CLASS WOOL	3.8												3.8	3.3
TOTAL RAW WOOL	**33.7**												**33.7**	**39.1**

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a. "Year to date" totals for stock, are the latest month's figures.

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

g. **Wool data for 1990 available on a quarterly basis only.**

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MANUFACTURED FIBER, COTTON & WOOL END USE SURVEY

HIGHLIGHTS

- Annual Manufactured Fiber, Cotton and Wool End Use Survey.
- Manufactured Fiber & Semimanufactured Imports 1989 . . . see page 206.

Due to Tariff Schedule Code changes, the U.S. Department of Agriculture Raw Fiber Equivalent Survey for 1989 has not been published. This study reflects preliminary estimates with best available data.

This month's issue of the ***Fiber Organon*** contains our annual report of U.S. manufactured, cotton and wool fiber consumption by end use. This report is part of a continuing series covering fiber end use for the 41 years 1949-1989.

This survey is to measure the amount of raw manufactured, cotton and wool fiber required to produce the various end use items. Other fibers such as silk, linen, jute and sisal are used in the various products covered by the survey, but no quantity data for these fibers are included in the end uses.

Comparability With Past Data

Every year we report the most up-to-date information on fiber end use, which means previous data must sometimes be revised. Data in a series which has been revised will be denoted by an "r". Changes in definitions or coverage in an end use item are noted in the definitions.

For example, data on glass fiber are no longer available to prevent disclosure of company-level data. These data were last reported in the September 1985 issue. There are new definitions for waste, apparel, home textiles and industrial and other consumer-type items.

The data in this survey may be used in conjunction with earlier issues of the ***Textile Organon & Fiber Organon*** as follows:

Years	***Textile Organon & Fiber Organon Issues***
1949-1955	November 1961
1956-1959	January 1966
1960-1963	January 1970
1964-1965	November 1971
1966-1967	November 1973
1968-1969	November 1975
1970	November 1976
1971-1972	November & December 1978
1973	November 1980
1974	November 1981
1975	November 1982
1976	November 1983
1977	September 1984
1978	September 1985
1979	September 1986
1983	September 1987
1984	September 1988
1985	September 1989

Continued On Page 203

TABLE 1:
U.S. FIBER CONSUMPTION BY END USE [a]

END USE	TOTAL FIBER								MANUFACTURED FIBER							
	MILLION POUNDS				% OF TOTAL END USE [b]				MILLION POUNDS				% OF TOTAL END USE [b]			
	1986	1987	1988	1989	1986	1987	1988	1989	1986	1987	1988	1989*	1986	1987	1988	1989
APPAREL	5138	5564	5152	5515	*40*	*40*	*38*	*39*	2637	2638	2512	2485	*30*	*29*	*27*	*27*
HOME TEXTILES	2000	2162	2048	2160	*15*	*16*	*15*	*16*	900	912	954	927	*10*	*10*	*10*	*10*
FLOOR COVERINGS	2799	2975	3050	2996	*22*	*21*	*23*	*21*	2767	2934	3017	2959	*32*	*32*	*33*	*32*
INDUSTRIAL & OTHER CONS. - TYPE PROD	2601	2806	2821	2842	*20*	*20*	*21*	*20*	2231	2419	2489	2504	*25*	*26*	*27*	*27*
EXPORTS	384	406	456	492	*3*	*3*	*3*	*4*	232	264	313	337	*3*	*3*	*3*	*4*
TOTAL END USE	**12922**	**13913**	**13527**	**14005**	***100***	***100***	***100***	***100***	**8767**	**9167**	**9285**	**9212**	***100***	***100***	***100***	***100***

*** FOR 1989, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES FOR APPAREL, HOME TEXTILES, FLOOR COVERINGS AND INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.**

All data are drawn from the U.S. End Use Summary table on page 204.

NOTE: Data on Glass Fiber is no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

a. Includes domestic shipments, fiber, yarn, fabric imports and waste.

b. The percentages in these columns show the usage of each type of fiber by its major end use categories. They add to 100% vertically.

Fiber Organon

A Monthly Review

SEPTEMBER 1990

CONTENTS

Features

- **Manufactured Fiber, Cotton & Wool End Use Survey** 201, 204 - 216
  - U.S Fiber Consumption by End Use 201
  - U.S. End Use Summary Excluding Glass 204
  - End Use Consumption Including Semimanufactured Imports 205
  - Manufactured Fiber & Semimanufactured Imports 206
  - Exports of Semimanufactured Products 207
  - Fiber Consumed in U.S. Production (Including Fiber, Yarn, Fabric Imports & Waste) of:
    - Apparel 208 - 209
    - Home Textiles (Excluding Floor Covering) 210 - 211
    - Floor Covering 211
    - Industrial & Other Consumer-Type Products 212 - 213
  - Notes for End Uses: 207, 214 - 216
    - Export Items 207
    - General 214
    - Apparel Items 214
    - Home Textile Items 215
    - Floor Covering Items 215
    - Industrial & Other Consumer-Type Items 215 - 216

Industry Regulars

- **Monthly U.S. Manufactured Fiber Data** 217 - 219
  - Imports by Country of Origin 217
  - Imports by Fiber 218
  - Exports by Fiber 219

- **Selected U.S. Monthly Fiber Data** 220

FIBER ECONOMICS BUREAU, INC.
President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc.
101 Eisenhower Parkway
Roseland, NJ 07068
U.S.A.
Telephone: (201) 228-1107
Facsimile: (201) 228-7598

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Continued From Front Page

SURVEY COVERAGE

Table Presentation

End use data are presented by type of fiber, manufactured, cotton and wool; by type of end use product; and by exports of domestic semimanufactured products. All data are in millions of pounds.

Table 1 shows both total and manufactured fiber consumption by end use for the years 1986, 1987, 1988 and 1989. In addition to the pounds of fiber consumed, the percentage of total end use is reported for five categories: apparel, home textiles, floor coverings, industrial and other consumer-type products and exports.

Table 2 presents greater fiber and annual detail than Table 1. Percentage distributions are given for both total end use and for individual end uses.

Tables 6 through 9 give further detail on each of the five end uses reported in Table 2, covering the same five year period 1985-1989. The major change in Tables 6-9 are: Home Textiles Item 51 is now "Curtains & Drapery", and Item 52 is "Upholstery" only (Table 7).

The substantial imports of finished products, such as apparel, blankets, tablecloths and rugs are not included in this survey as they are not manufactured in domestic mills.

Fibers Covered

The manufactured fiber data are presented in two general categories. Artificial (Cellulosic), which includes rayon and acetate, and Synthetic (Noncellulosic), which includes nylon, polyester, acrylic and olefin. Glass fiber is no longer included. See footnote (b) under General Notes on page 214 for additional descriptions. The cotton end use data cover raw cotton. Cotton waste and cotton linters quantities are excluded, except when pertaining to waste. See the section describing waste fiber coverage for further explanation. Wool data cover both virgin and reprocessed and reused wool.

SURVEY WASTE FIBER COVERAGE

In the survey, textile fiber waste is handled in three different ways: First, end uses which employ waste fiber, either wholly or in part without preliminary processing are not included (e.g., furniture stuffing, mattress felts, punched or needled felts for carpet & rug underlays, pressed wool felts and some nonwoven fabrics).

Second, for certain end uses which utilize both new fiber and the fiber derived from processed waste, the quantities shown have been calculated so as to exclude the waste component inasmuch as possible.

And third, waste which has been processed into usable spinnable fiber is included in the quantities shown for Blankets (Item 46), Carpets & Rugs (Item 50) and a number of other applications. It is important to note that in products such as these, fiber derived from waste by preliminary processing, especially for the manufactured fiber quantities, is a significant and measured part of the total end use.

METHODOLOGY

COTTON: The cotton series presented in earlier issues were mainly those of the National Cotton Council as published in its annual survey ***"Cotton Counts Its Customers"*** (1989 and earlier editions).

With the 1989 issue we changed the methodology in using the bale opening figure from the Bureau of the Census Report M22P plus imports. ***Cotton Counts Its Customers*** is used as an indicator for the end use distribution.

WOOL: The Wool Bureau and government data are employed.

Blends of wool with other fibers are common in many end uses, but little information is available on the fiber composition of these blends. Thus, relatively reliable measures are available mainly on the wool quantities used in Home Textiles (blankets and carpets) and such Apparel items as Craft Yarns.

These quantities were deducted from the Available Supply in Table 3, page 205, and residual quantities were then attributed to Apparel Usage in individual apparel items from the years 1985 - 1989. This was calculated by correlating the data of Census reports MA-23A and MQ-22T on Apparel and Broad Woven Goods, respectively.

MANUFACTURED FIBERS: The manufactured fiber data are based on producers' domestic shipments plus imports of fiber, yarn and semimanufactured products.

Continued on Page 205

TABLE 2:
U.S. END USE SUMMARY EXCLUDING GLASS FIBER
MILLION POUNDS & *PERCENT*

END USE & YEAR	GRAND TOTAL			COTTON			WOOL			MANUFACTURED FIBERS			MANUFACTURED FIBER DETAIL									
													ARTIFICIAL (CELL.)					SYNTHETIC (NONCELL.)				
													TOTAL			YARN LBS	STAPLE* LBS	TOTAL			YARN LBS	STAPLE LBS
	LBS	%[a]	%[b]	LBS	%[a]	%[b]	LBS	%[a]	%[b]	LBS	%[a]	%[b]	LBS	%[a]	%[b]			LBS	%[a]	%[b]		
APPAREL																						
1985	4483	100	38.2	1966	43.9	58.3	142	3.2	72.4	2375	52.9	29.1	208	4.6	38.3	141	67	2167	48.3	28.4	1086	1081
1986	5138	100	39.8	2343	45.6	59.5	158	3.1	73.5	2637	51.3	30.0	257	5.0	42.4	151	106	2380	46.3	29.2	1004	1376
1987	5564	100	40.0	2769	49.9	61.3	157	2.8	69.5	2638	47.3	28.8	236	4.2	40.2	123	113	2402	43.2	28.0	979	1423
1988	5152	100	38.1	2501	48.5	62.0	139	2.7	66.2	2512	48.8	27.1	276	5.4	45.0	143	133	2236	43.4	25.8	879	1357
1989	5515	100	39.4	2892	52.4	63.1	138	2.5	65.7	2485	45.1	27.0	274	5.0	45.7	150	124	2211	40.1	25.7	890	1321
HOME TEXTILES																						
1985	1895	100	16.1	911	48.1	27.0	18	0.9	9.2	966	51.0	11.8	126	6.6	23.2	19	107	840	44.4	11.0	293	547
1986	2000	100	15.5	1082	54.0	27.5	18	0.9	8.4	900	45.1	10.3	131	6.6	21.6	17	114	769	38.5	9.4	245	524
1987	2162	100	15.5	1232	57.0	27.3	18	0.8	8.0	912	42.2	9.9	139	6.4	23.7	22	117	773	35.8	9.0	249	524
1988	2048	100	15.1	1075	52.6	26.7	19	0.9	9.0	954	46.5	10.3	130	6.3	21.2	21	109	824	40.2	9.5	271	553
1989	2160	100	15.4	1214	56.2	26.5	19	0.9	9.0	927	42.9	10.1	123	5.7	20.5	21	102	804	37.2	9.3	283	521
FLOOR COVERINGS																						
1985	2565	100	21.8	15	0.6	0.4	12	0.5	6.1	2538	98.9	31.1	1	0	0.2	0	1	2537	98.9	33.3	1399	1138
1986	2799	100	21.7	15	0.5	0.4	17	0.6	7.9	2767	98.9	31.6	2	0.1	0.3	0	2	2765	98.8	33.9	1535	1230
1987	2975	100	21.4	18	0.6	0.4	23	0.8	10.2	2934	98.6	32.0	1	0	0.2	0	1	2933	98.6	34.2	1614	1319
1988	3050	100	22.5	12	0.4	0.3	21	0.7	10.0	3017	98.9	32.5	1	0	0.2	0	1	3016	98.9	34.8	1647	1369
1989	2996	100	21.4	13	0.4	0.3	24	0.8	11.4	2959	98.8	32.1	1	0	0.2	0	1	2958	98.8	34.3	1660	1298
INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS																						
1985	2468	100	21.0	375	15.2	11.1	13	0.5	6.6	2080	84.3	25.5	192	7.8	35.4	30	162	1888	76.5	24.8	969	919
1986	2601	100	20.1	357	13.7	9.1	13	0.5	6.0	2231	85.8	25.4	197	7.6	32.5	28	169	2034	78.2	24.9	1107	927
1987	2806	100	20.2	374	13.3	8.3	13	0.5	5.8	2419	86.2	26.4	189	6.7	32.2	22	167	2230	79.5	26.0	1185	1045
1988	2821	100	20.9	320	11.4	7.9	12	0.4	5.7	2489	88.2	26.8	181	6.4	29.5	21	160	2308	81.8	26.6	1238	1070
1989	2842	100	20.3	329	11.6	7.2	9	0.3	4.3	2504	88.1	27.2	175	6.2	29.2	26	149	2329	81.9	27.0	1266	1063
EXPORTS OF DOMESTIC PRODUCTS																						
1985	329	100	2.9	108	32.8	3.2	11	3.3	5.7	210	63.9	2.6	16	4.9	2.9	9	7	194	59.0	2.5	76	118
1986	384	100	2.9	143	37.3	3.5	9	2.3	4.2	232	60.4	2.6	19	4.9	3.1	11	8	213	55.5	2.6	88	125
1987	406	100	2.9	127	31.3	2.8	15	3.7	6.5	264	65.0	2.9	22	5.4	3.7	13	9	242	59.6	2.8	100	142
1988	456	100	3.4	124	27.2	3.1	19	4.2	9.1	313	68.6	3.4	25	5.5	4.1	15	10	288	63.1	3.3	119	169
1989	492	100	3.5	135	27.4	2.9	20	4.1	9.6	337	68.5	3.6	27	5.5	4.4	16	11	310	63.0	3.7	128	182
TOTAL END USE CONSUMPTION																						
1985	11740	100	100	3375	28.7	100	196	1.7	100	8169	69.6	100	543	4.6	100	199	344	7626	65.0	100	3823	3803
1986	12922	100	100	3940	30.4	100	215	1.7	100	8767	67.9	100	606	4.7	100	207	399	8161	63.2	100	3979	4182
1987	13913	100	100	4520	32.6	100	226	1.6	100	9167	65.8	100	587	4.2	100	180	407	8580	61.7	100	4127	4453
1988	13527	100	100	4032	29.8	100	210	1.6	100	9285	68.6	100	613	4.5	100	200	413	8672	64.1	100	4154	4518
1989	14005	100	100	4583	32.7	100	210	1.5	100	9212	65.8	100	600	4.3	100	213	387	8612	61.5	100	4227	4385

*** FOR 1989, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES FOR APPAREL, HOME TEXTILES, FLOOR COVERINGS AND INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.**

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

a. The percentages in these columns show the share of each fiber in the specified end use each year. They add horizontally to the 100% shown in each of the Grand Total columns.

b. The percentages in these columns show the usage of each type of fiber by its major end use categories. They add vertically to the 100% shown under Total End Use Consumption.

TABLE 3:
END USE CONSUMPTION INCLUDING SEMIMANUFACTURED IMPORTS[e]
MILLION POUNDS

	MANUFACTURED FIBERS									COTTON			WOOL					
	MILL CONSUMPTION																	
	ARTIFICAL (CELLULOSIC)			SYNTHETIC (NONCELLULOSIC)													
YEAR	YARN	STAPLE[b]	TOTAL	YARN	STAPLE[b]	TOTAL	IMPORTS[c]	TOTAL	MILL CONS.[a]	IMPORTS[c]	TOTAL	MILL CONS.[a]	REPRO-CESSED & REUSED[d]	COTTON SYSTEM[d]	IMPORTS[c]	TOTAL	AVAIL-ABLE SUPPLY
1985	201.0	344.6	545.6	3663.8	3826.1	7489.9	203.8	8239.3	2796.0	477.5	3273.5	134.7	5.3	4.2	50.5	194.7	11707.5
1986	209.1	399.2	608.3	3747.3	4098.3	7845.6	341.3	8795.2	3301.7	638.8	3940.5	164.5	9.5	8.5	39.6	222.1	12957.8
1987	179.6	406.0	585.6	3927.1	4349.0	8276.1	303.6	9165.3	3736.5	784.4	4520.9	167.6	7.9	6.9	44.1	226.5	13912.7
1988	200.2	412.7	612.9	4045.9	4359.1	8405.0	273.3	9291.2	3470.1	561.9	4032.0	156.1	3.8	6.8	43.0	209.7	13532.9
1989	213.6	387.3	600.9	4094.2	4314.7	8408.9	*286.4	9296.2	3937.1	*646.2	4583.3	153.9	4.5	13.8	*38.0	210.2	14089.7

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

* Preliminary estimates.

[a] Mill Consumption is taken from page 72 of the April 1990 ***Fiber Organon***, plus subsequent revisions.

[b] Manufactured staple includes waste.

[c] Imports are taken from page 54 of the March 1989 ***Textile Organon.***

[d] These volumes of reprocessed and reused wool, as well as wool used on the cotton spinning system, are not included in the mill consumption series for wool.

[e] Semimanufactured imports are taken from page 206 of this issue.

Continued From Page 203

UNIT PRODUCTION VERSUS FIBER CONSUMED

This survey shows the quantity of raw fiber which had to be put into process in order to manufacture end products. No direct comparison can be, or should be, made between the quantities of the fibers consumed, as recorded in the survey, and the finished or "shelf" weight of those end products by fiber. Comparison should be avoided because:

1. The variation in the weight per square yard of fabric made of the different fibers for the same end use. According to recent data collected by the U.S. Census Bureau, cotton fabrics averaged 7.0 square yards per pound and wool 0.6 square yards per pound. But for manufactured fiber, 100% filament yarn fabrics averaged 4.4 square yards per pound and spun yarn fabrics averaged 3.3 square yards per pound.

2. From these data, it is apparent that the "covering power" of fabrics made from the various fibers varies a great deal. Hence, a simple comparison of quantities of fibers consumed would be misleading both because of the differences in fibers concerning covering power and the difference in typical fabric weights of products made of the various fibers, as described.

Continued On Page 210

TABLE 4:
MANUFACTURED FIBER & SEMIMANUFACTURED IMPORTS
MILLION POUNDS

ITEM	1989
ARTIFICIAL (CELLULOSIC) FIBER	
FILAMENT YARN	
HIGH TENACITY	2.5
TEXTURED	1.4
OTHER	21.4
MONOFILAMENTS & STRIPS	1.0
SUBTOTAL ABOVE	**26.3**
STAPLE	53.1
TOW	0.8
TOPS	0.1
SUBTOTAL ABOVE	**54.0**
WASTE	**0.6**
SYNTHETIC (NONCELLULOSIC) FIBERS	
FILAMENT YARN	
NYLON	
HIGH TENACITY	19.5
TEXTURED	
UP TO 450 DENIER	3.5
OVER 450 DENIER	14.1
OTHER	47.2
MONOFILAMENTS & STRIPS	1.3
SUBTOTAL ABOVE	**85.6**
POLYESTER	
HIGH TENACITY	7.8
TEXTURED	19.0
POY	16.3
OTHER	18.9
MONOFILAMENTS & STRIPS	0.7
SUBTOTAL ABOVE	**62.7**
OTHER SYNTHETIC FILAMENT	
TEXTURED	19.2
OTHER	7.8
MONOFILAMENTS & STRIPS	6.9
SUBTOTAL ABOVE	**33.9**
STAPLE	
NYLON	21.7
POLYESTER	117.7
ACRYLIC	17.9
POLYPROPYLENE	2.1
OTHER	4.4
TOW	
NYLON	4.5
POLYESTER	0.9
ACRYLIC	19.6
OTHER	0.6
TOPS	3.0
SUBTOTAL ABOVE	**192.4**
WASTE	
NYLON	24.0
POLYESTER	17.0
OTHER	7.0
TOTAL MANUFACTURED FIBERS ABOVE	**503.5**
SEMIMANUFACTURES [a]	
SLIVER, TOPS & ROVING	4.6
YARNS, THROWN OR PLIED	12.7
SPUN YARNS	48.8
SEWING THREAD	6.5
WOVEN FABRICS	186.4
NARROW FABRICS	15.4
KNIT FABRIC	12.0
TOTAL SEMIMANUFACTURES ABOVE	**286.4**
GRAND TOTAL ABOVE	**789.9**

SOURCES: U.S. Census Bureau Report IM146; U.S. Department of Agriculture, ***Cotton & Wool Situation and Outlook Report.***

Effective January 1,1989 the U.S. Imports are based on the new Harmonized System (HS). The Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers, Annotated for Statistical Reporting Purposes. **Data for 1989 is not comparable to prior years.** Data for 1984 through 1988 are reported on page 206 of the September 1989 ***Fiber Organon*** issue.
a. Preliminary.

TABLE 5:
EXPORTS OF SEMIMANUFACTURED PRODUCTS[a]
MILLION POUNDS

		MANUFACTURED FIBERS[b]						
	TOTAL		ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
END USE & YEAR	FIBER	TOTAL	YARN	STAPLE	YARN	STAPLE	COTTON	WOOL
TOTAL EXPORTS OF SEMIMANUFACTURED PRODUCTS								
1985	328.6	209.7	9.6	6.6	75.8	117.7	108.0	10.9
1986	383.7	232.1	11.0	7.6	88.0	125.5	143.0	8.6
1987	405.6	263.8	12.5	8.6	100.3	142.4	126.9	14.9
1988	455.0	312.6	14.7	10.3	118.8	168.8	123.8	18.6
1989	492.6	337.6	15.9	11.1	128.3	182.3	134.9	20.1
80 YARN, THREAD, ETC[c]								
1985	86.0	50.9	[e]	2.7	[e]	48.4	25.8	9.3
1986	70.8	47.9	[e]	2.5	[e]	45.4	16.6	6.3
1987	86.2	53.9	[e]	2.8	[e]	51.1	19.6	12.7
1988	110.2	66.5	[e]	3.5	[e]	63.0	27.2	16.5
1989	117.7	70.2	[e]	3.8	[e]	66.4	29.7	17.8
81 WOVEN & KNIT FABRIC[c]								
1985	242.4	158.6	9.6	3.9	75.8	69.3	82.2	1.6
1986	312.9	184.2	11.0	5.1	88.0	80.1	126.4	2.3
1987	319.4	209.9	12.5	5.8	100.3	91.3	107.3	2.2
1988	344.8	246.1	14.7	6.8	118.8	105.8	96.6	2.1
1989	374.9	267.4	15.9	7.3	128.3	115.9	105.2	2.3

SOURCE: U.S. Department of Agriculture, ***Cotton & Wool Situation and Outlook Report.***
For all lettered and general footnotes to this table, see page 214.

1989 PRELIMINARY ESTIMATES.

This is a non-add section since the volumes are included in Tables 2 and 6 through 9.

NOTES FOR EXPORT ITEMS ABOVE

For all lettered and general footnotes to this table, see page 214.

These exports do not duplicate the end use quantities that are reported in Items 1 through 79. Apparel items are not tabulated here because they already have been counted as the fabric was cut, i.e., they are counted only once regardless of the subsequent place of sale or consumer use.

Similarly, fabrics for blankets, sheets, upholstery & draperies, carpets, etc., are excluded since they are measured at the mill level as an end use.

The exports of manufactured fiber filament yarn+monofilaments, staple, tow, etc., are not tabulated in this section because these products are not a factor in U.S. mill consumption.

On the other hand, the two export items are recorded because, while they were processed or fabricated in U.S. mills, they were exported before reaching the point at which end use is measured.

80. YARN, THREAD, ETC:
Consists of sliver, tops & roving; plied and spun yarn; sewing thread and handwork yarns; cotton twine and cordage; and advanced wool.

81. WOVEN & KNIT FABRIC:
Consists of broad & narrow woven fabrics and knit cloth, except that cotton also includes table damask and tire cord & fabric.

TABLE 6:
FIBER CONSUMED IN U.S. APPAREL PRODUCTION INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE[a]
MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS[b]					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
TOTAL APPAREL								
1985	4482.8	2374.7	140.7	66.9	1086.5	1080.6	1966.4	141.7
1986	r5137.7	r2636.4	150.8	r105.5	1003.7	1376.4	2342.7	158.6
1987	r5563.4	2637.5	123.4	112.8	978.8	1422.5	r2769.2	156.7
1988	r5151.8	2511.8	143.5	r133.0	r879.0	r1356.3	r2501.2	r138.8
1989	5514.5	2485.4	150.1	124.1	890.2	1321.0	2891.5	137.6
40 SHEER HOSIERY (W)*								
1985	86.4	83.0	- -	- -	83.0	- -	3.4	- -
1986	91.0	87.2	- -	- -	87.2	- -	r3.8	- -
1987	r95.4	91.3	- -	- -	91.3	- -	r4.1	- -
1988	r97.7	93.8	- -	- -	93.8	- -	r3.9	- -
1989	108.3	103.9	- -	- -	103.9	- -	4.4	- -
19,41 ANKLETS & SOCKS (MW)*								
1985	189.3	122.7	- -	0.4	56.9	65.4	63.9	2.7
1986	210.8	127.7	c	0.4	57.3	70.0	79.3	3.8
1987	r224.5	112.8	c	0.4	59.0	53.4	r107.9	3.8
1988	r216.0	106.0	0.1	0.3	58.6	47.0	r106.6	3.4
1989	252.8	120.7	c	0.2	77.8	42.7	128.8	3.3
8,29 SWEATERS & RELATED ACCESSORIES								
1985	186.9	110.3	- -	1.2	0.6	108.5	59.8	16.8
1986	274.9	r164.0	- -	1.5	0.4	162.1	91.9	19.0
1987	r257.8	r155.6	- -	0.3	0.3	155.0	r82.9	19.3
1988	r214.7	140.9	0.1	0.1	0.4	140.3	r58.8	r15.0
1989	217.7	140.0	- -	0.1	0.1	139.8	63.1	14.6
57 CRAFT & HANDWORK YARNS*								
1985	92.1	85.1	- -	0.1	0.3	84.7	2.7	4.3
1986	91.2	82.4	1.2	0.2	c	81.0	4.8	4.0
1987	r80.6	72.0	0.9	0.2	c	70.9	r4.6	4.0
1988	r74.5	67.6	1.1	0.2	- -	66.3	r3.8	r3.1
1989	71.5	64.9	0.9	0.2	- -	63.8	4.4	2.2
16-18 UNDERWEAR & NIGHTWEAR (M)*								
1985	264.0	83.6	- -	- -	8.0	75.6	179.6	0.8
1986	320.8	108.8	- -	- -	12.5	96.3	211.8	0.2
1987	r356.9	100.0	- -	- -	10.5	89.5	r256.7	0.2
1988	r337.8	84.8	- -	- -	8.7	76.1	r252.8	0.2
1989	354.9	79.7	- -	- -	7.6	72.1	275.0	0.2
35-39 UNDERWEAR, NIGHTWEAR, BRAS AND FOUNDATIONS (W)*								
1985	189.9	136.7	6.8	- -	105.2	24.7	52.4	0.8
1986	194.0	128.9	8.0	- -	94.8	26.1	64.9	0.2
1987	r204.8	123.7	1.9	- -	92.0	29.8	r80.9	0.2
1988	r199.6	125.2	2.9	- -	88.3	34.0	r74.2	0.2
1989	237.7	153.1	5.4	- -	94.2	53.5	84.4	0.2
10,31 ROBES & LOUNGEWEAR (MW)*								
1985	84.9	70.6	37.2	- -	20.3	13.1	12.0	2.3
1986	93.1	73.8	31.2	- -	23.5	19.1	17.0	2.3
1987	r89.9	61.7	19.7	- -	22.9	19.1	r25.9	2.3
1988	r85.9	63.9	19.3	- -	27.9	16.7	r19.7	2.3
1989	97.0	72.4	16.2	- -	35.0	21.2	22.4	2.2

TABLE 6:
FIBER CONSUMED IN U.S. APPAREL PRODUCTION INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE [a] (CONTINUED)

MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS [b]					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
54a HIGH PILE FABRICS								
1985	57.1	57.1	- -	- -	6.4	50.7	- -	- -
1986	59.0	59.0	- -	- -	10.6	48.4	- -	- -
1987	67.9	67.9	- -	2.0	15.4	50.5	- -	- -
1988	r54.2	r54.2	- -	- -	8.3	r45.9	- -	- -
1989	54.7	54.7	4.0	- -	8.9	41.8	- -	- -
54b FABRICS FOR LINING*								
1985	146.2	103.5	74.2	1.5	17.6	10.2	40.0	2.7
1986	179.3	133.9	98.3	3.6	18.5	13.5	42.6	2.8
1987	r181.6	136.1	90.4	5.8	23.6	16.3	r42.6	2.9
1988	r176.6	139.1	104.1	6.5	18.3	10.2	r34.8	2.7
1989	171.9	129.9	95.7	6.1	20.8	7.3	39.5	2.5
43 APPAREL LACE (W)*								
1985	6.1	4.6	- -	- -	4.6	- -	1.5	- -
1986	4.3	2.8	- -	- -	2.8	- -	1.5	- -
1987	3.9	2.4	0.3	- -	2.1	- -	1.5	- -
1988	4.6	3.1	- -	- -	3.1	- -	1.5	- -
1989	7.7	6.2	- -	- -	6.2	- -	1.5	- -
56a NARROW FABRICS*								
1985	46.9	23.3	1.5	- -	20.1	1.7	23.6	- -
1986	59.9	35.1	2.1	- -	30.1	2.9	24.8	- -
1987	77.7	51.6	2.2	- -	46.4	3.0	26.1	- -
1988	78.5	51.7	2.6	- -	46.4	2.7	26.8	- -
1989	89.3	62.4	4.3	- -	56.2	1.9	26.9	- -
TOPWEIGHT FABRICS*								
1985	1040.4	496.2	16.5	35.7	173.0	271.0	540.1	4.1
1986	r1209.4	r579.5	7.5	r55.4	148.2	368.4	626.3	3.6
1987	r1489.8	718.7	5.6	49.3	127.5	536.3	r767.4	3.7
1988	r1452.4	r724.1	5.8	r55.5	130.1	532.7	724.9	3.4
1989	1630.1	729.2	11.3	51.7	149.4	516.8	897.6	3.3
BOTTOMWEIGHT FABRICS*								
1985	2046.8	990.8	4.5	27.8	587.5	371.0	948.8	107.2
1986	r2294.2	r1044.7	2.5	r43.9	514.4	r483.9	1126.8	122.7
1987	r2370.2	r934.9	2.4	53.3	484.5	r394.7	r1315.0	120.3
1988	r2092.2	r839.2	2.5	r66.9	r391.5	378.3	r1144.5	108.5
1989	2150.6	749.9	1.3	62.4	326.6	359.6	1291.6	109.1
OTHER APPAREL & ACCESSORIES (MW)*								
1985	45.8	7.2	- -	0.2	3.0	4.0	38.6	c
1986	55.8	8.6	- -	0.5	3.4	4.7	47.2	c
1987	r62.4	8.8	- -	1.5	3.3	4.0	r53.6	c
1988	r67.1	18.2	5.0	3.5	3.6	6.1	r48.9	c
1989	70.3	18.4	11.0	3.4	3.5	0.5	51.9	c

*** FOR 1989, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.**

Most of the above data are taken from the Fiber Economics Bureau's publication ***Manufactured Fiber Handbook.***

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

For all lettered and general footnotes to this table and the Home Textiles, Floor Covering and Industrial & Other Consumer-Type Products tables, please see page 214.

TABLE 7:
FIBER CONSUMED IN U.S. HOME TEXTILES PRODUCTION INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE EXCLUDING FLOOR COVERINGS[a]

MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS[b]						COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)				
			YARN	STAPLE*	YARN	STAPLE			
TOTAL HOME TEXTILES									
1985	1895.4	966.4	18.5	107.1	293.4	547.4		911.3	17.7
1986	1999.7	900.0	16.8	113.9	244.9	524.4		1082.1	17.6
1987	r2162.3	912.3	21.8	117.2	248.8	524.5		r1232.0	18.0
1988	r2047.7	r953.8	20.8	108.8	270.6	r553.6		r1074.8	r19.1
1989	2160.5	927.1	20.9	101.5	283.2	521.5		1214.4	19.0
45 BEDSREADS & QUILTS*									
1985	134.8	77.2	c	6.0	17.2	54.0		57.6	- -
1986	146.6	80.0	0.2	6.3	19.1	54.6		66.6	- -
1987	r178.8	93.8	- -	3.3	20.5	70.0		r85.0	- -
1988	r189.8	109.7	0.2	- -	29.0	80.7		r80.1	- -
1989	156.6	72.7	- -	- -	21.9	50.8		83.9	- -
46 BLANKETS & BLANKETING*									
1985	74.8	54.6	- -	0.2	- -	54.4		16.1	4.1
1986	77.0	51.1	- -	0.2	- -	50.9		21.6	4.3
1987	r80.6	51.8	- -	0.2	- -	51.6		r24.7	4.1
1988	r72.9	r43.5	- -	0.2	- -	r43.3		r25.2	r4.2
1989	85.0	48.7	- -	0.2	- -	48.5		31.0	5.3
47 SHEETS & OTHER BEDDING*									
1985	493.4	269.3	1.5	12.5	77.7	177.6		224.1	- -
1986	520.3	254.8	1.9	12.7	70.1	170.1		265.5	- -
1987	r520.2	235.2	1.5	7.2	59.7	166.8		r285.0	- -
1988	r494.1	239.0	0.4	6.2	60.8	172.0		r255.1	- -
1989	513.7	228.5	- -	5.8	48.0	174.7		285.2	- -
48 TOWELS & TOWELING*									
1985	414.5	22.3	- -	0.9	0.2	21.2		392.2	- -
1986	500.6	31.9	- -	0.5	0.2	31.2		468.7	- -
1987	r556.4	34.2	- -	0.1	0.5	33.6		r522.2	- -
1988	r457.2	36.7	- -	0.2	0.5	36.0		r420.5	- -
1989	505.5	26.6	- -	0.2	- -	26.4		478.9	- -
56b NARROW FABRICS*									
1985	4.8	1.2	- -	- -	1.2	c		3.6	- -
1986	4.1	0.3	- -	- -	0.2	0.1		3.8	- -
1987	6.2	2.2	- -	- -	1.7	0.5		4.0	- -
1988	6.0	2.0	- -	- -	1.8	0.2		4.0	- -
1989	7.5	3.5	- -	- -	0.1	3.4		4.0	- -

Continued From Page 205

LIMITATIONS OF THE SURVEY RESULTS

The statistical results of this end use survey should be considered as approximations. These data are best used as a means of comparison to measure the long-term trends among the fibers.

Please note that the data are given in millions of pounds and include one decimal place to show hundred thousand pounds. This device is employed not to show great accuracy, but rather to take into account some small quantities of fibers in such end uses as Apparel Lace and still allow the compilation to add arithmetically.

TABLE 7:
FIBER CONSUMED IN U.S. HOME TEXTILES PRODUCTION INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE EXCLUDING FLOOR COVERINGS [a] (CONTINUED)
MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS [b]					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
51 CURTAINS & DRAPERY*								
1985	242.4	172.5	14.4	44.4	43.7	70.0	69.9	- -
1986	277.8	190.2	14.3	48.9	45.2	81.8	87.6	- -
1987	r273.8	163.1	19.7	52.2	42.5	48.7	r110.7	- -
1988	r259.7	161.9	19.9	49.9	50.4	61.6	r97.8	- -
1989	292.7	170.3	17.0	46.6	60.2	63.5	122.4	- -
52 UPHOLSTERY*								
1985	400.8	261.3	0.4	36.7	104.6	119.6	125.9	13.6
1986	390.6	229.3	0.4	44.3	92.0	92.6	148.0	13.3
1987	r464.7	269.2	0.1	53.2	93.0	122.9	r181.6	13.9
1988	r450.1	259.8	- -	48.7	86.3	124.8	r175.4	r14.9
1989	478.6	273.6	0.8	45.5	109.7	118.4	191.3	13.7
OTHER HOME TEXTILES*								
1985	129.9	108.0	2.2	6.4	48.8	50.6	21.9	- -
1986	82.5	62.2	- -	1.0	18.1	43.1	20.3	- -
1987	r81.6	62.8	0.5	1.0	30.9	30.4	r18.8	- -
1988	r97.1	80.4	0.3	3.6	41.8	35.0	r16.7	- -
1989	100.0	82.3	3.1	3.2	43.3	35.8	17.7	- -

TABLE 8:
FIBER CONSUMED IN U.S. FLOOR COVERINGS PRODUCTION INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE [a]
MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS [b]					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
50 TOTAL CARPETS & RUGS*								
1985	2564.7	2538.0	- -	1.3	1398.5	1138.2	14.8	11.9
1986	2799.7	2767.0	- -	1.5	1535.2	1230.3	15.3	17.4
1987	r2974.7	2933.6	- -	0.8	1613.7	1319.1	r17.6	23.5
1988	r3050.2	r3016.9	- -	0.9	r1646.9	1369.1	r11.7	21.6
1989	2996.6	2958.8	- -	1.1	1659.7	1298.0	13.3	24.5
50a FACE YARNS*								
1985	2134.3	2112.2	- -	1.3	1043.9	1067.0	10.2	11.9
1986	2305.0	2277.9	- -	1.5	1131.1	1145.3	9.7	17.4
1987	r2462.0	2429.3	- -	0.8	1188.4	1240.1	r9.2	23.5
1988	r2525.3	r2497.7	- -	0.9	r1219.9	1276.9	r6.0	21.6
1989	2430.6	2399.2	- -	1.1	1196.3	1201.8	6.9	24.5
50b BACKING*								
1985	430.4	425.8	- -	- -	354.6	71.2	4.6	- -
1986	494.7	489.1	- -	- -	404.1	85.0	5.6	- -
1987	r512.7	504.3	- -	- -	425.3	79.0	r8.4	- -
1988	r524.9	519.2	- -	- -	427.0	92.2	r5.7	- -
1989	566.0	559.6	- -	- -	463.4	96.2	6.4	- -

FOOTNOTES FOR BOTH TABLE 7 & TABLE 8:

*** FOR 1989, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.**

Most of the above data are taken from the Fiber Economic Bureau's publication ***Manufactured Fiber Handbook.***

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

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TABLE 9:
FIBER CONSUMED IN U.S. INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE [a]

MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS [b]					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
TOTAL INDUSTRIAL & OTHER CONSUMER								
1985	2468.3	2080.2	30.6	161.9	968.6	919.1	375.0	13.1
1986	r2601.4	r2231.1	28.1	r169.3	1107.0	926.7	356.9	13.4
1987	r2805.9	2418.5	22.0	166.6	1185.2	1044.7	r374.0	13.4
1988	r2822.1	2489.4	21.0	160.0	1238.6	1069.8	r320.5	r12.2
1989	2841.8	2503.6	25.6	149.3	1265.8	1062.9	329.2	9.0
*65 TIRES**								
1985	314.7	311.4	9.8	--	301.6	--	3.3	--
1986	300.1	297.6	9.0	--	288.6	--	2.5	--
1987	316.6	313.9	8.1	--	305.8	--	2.7	--
1988	r312.8	309.9	5.9	--	304.0	--	r2.9	--
1989	315.6	312.6	6.0	--	306.6	--	3.0	--
*66 HOSE**								
1985	29.3	27.3	11.8	--	15.1	0.4	2.0	--
1986	30.4	27.6	11.0	--	15.9	0.7	2.8	--
1987	30.2	27.5	9.4	--	17.2	0.9	2.7	--
1988	r34.4	31.3	8.4	--	17.7	5.2	r3.1	--
1989	34.8	32.7	7.1	--	21.9	3.7	2.1	--
*67 BELTING**								
1985	43.5	32.7	2.5	--	24.3	5.9	10.8	--
1986	41.7	31.1	3.1	--	23.3	4.7	10.6	--
1987	46.7	37.0	2.5	--	26.6	7.9	9.7	--
1988	r50.1	41.6	1.6	--	24.3	15.7	r8.5	--
1989	55.3	48.9	2.2	--	34.3	12.4	6.4	--
*61 MEDICAL, SURGICAL & SANITARY**								
1985	383.6	303.5	--	105.9	58.7	138.9	80.1	--
1986	r457.8	r371.2	--	r116.8	94.4	160.0	86.6	--
1987	r454.6	369.1	--	75.5	102.4	191.2	r85.5	--
1988	r455.2	382.1	--	85.1	117.2	179.8	r73.1	--
1989	459.4	377.9	c	78.1	120.3	179.5	81.5	--
*79b UNALLOCATED NONWOVENS**								
1985	140.2	140.2	--	12.9	--	127.3	--	--
1986	149.5	149.5	--	14.9	--	134.6	--	--
1987	223.6	223.6	--	50.5	--	173.1	--	--
1988	257.9	257.9	--	46.7	--	211.2	--	--
1989	265.4	265.4	--	43.6	--	221.8	--	--
*79a FIBERFILL, STUFFING & FLOCK**								
1985	354.9	354.9	--	6.5	--	348.4	--	--
1986	368.7	368.7	--	3.1	--	365.6	--	--
1987	403.8	403.8	--	0.4	--	403.4	--	--
1988	420.1	420.1	--	1.7	--	418.4	--	--
1989	418.7	418.7	--	1.6	--	417.1	--	--
*70 FELTS**								
1985	23.7	10.6	--	2.0	3.9	4.7	1.0	12.1
1986	25.0	11.7	--	2.2	4.3	5.2	1.0	12.3
1987	20.4	7.1	--	3.2	3.9	8.1	1.0	12.3
1988	r17.6	5.4	--	1.6	3.8	8.9	1.0	r11.2
1989	27.1	18.1	--	1.5	3.2	13.4	1.0	8.0
*71 FILTRATION**								
1985	37.4	32.8	--	3.2	5.2	24.4	4.6	--
1986	38.4	32.7	--	4.6	4.1	24.0	5.7	--
1987	r34.5	28.3	--	8.3	3.5	16.5	r6.2	--
1988	r32.9	30.4	--	4.1	3.6	22.7	r2.5	--
1989	34.7	31.2	--	3.9	3.2	24.1	3.5	--

For all lettered and general footnotes to this table and the Apparel, Home Textiles and Floor Covering tables, please see page 214.

TABLE 9:
FIBER CONSUMED IN U.S. INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE[a] (CONTINUED)

MILLION POUNDS

		MANUFACTURED FIBERS[b]						
			ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
END USE & YEAR	TOTAL FIBER	TOTAL	YARN	STAPLE*	YARN	STAPLE	COTTON	WOOL
*73 ROPE, CORDAGE, FISHLINE, ETC**								
1985	184.3	168.9	0.6	0.4	157.3	10.6	15.4	- -
1986	189.8	175.1	0.4	1.7	155.7	17.3	14.7	- -
1987	r192.7	167.9	0.9	0.5	158.0	8.5	r24.8	- -
1988	r179.8	159.0	0.6	0.1	153.9	4.4	r20.8	- -
1989	197.0	177.1	0.6	0.1	174.1	2.3	19.9	- -
*72 SEWING THREAD**								
1985	127.3	84.5	0.4	6.7	60.4	17.0	42.8	- -
1986	129.6	84.6	0.4	3.9	63.5	16.8	45.0	- -
1987	r140.2	94.9	0.4	4.1	69.4	21.0	r45.3	- -
1988	r151.9	113.5	0.3	1.9	91.0	20.3	r38.4	- -
1989	142.9	102.0	0.4	1.8	78.1	21.7	40.9	- -
*76 PAPER & TAPE REINFORCING**								
1985	6.8	3.9	1.8	0.4	1.7	- -	2.9	- -
1986	5.5	3.4	0.9	0.1	2.4	c	2.1	- -
1987	r7.0	4.7	0.7	0.7	2.5	0.8	r2.3	- -
1988	r6.5	4.5	0.4	- -	1.2	2.9	r2.0	- -
1989	6.5	4.3	1.5	- -	0.6	2.2	2.2	- -
*69,77 ELECTRICAL & REINFORCED PLASTICS**								
1985	31.3	6.3	0.1	- -	6.2	- -	25.0	- -
1986	29.1	4.1	c	- -	3.9	0.2	25.0	- -
1987	30.4	5.4	c	0.4	4.2	0.8	25.0	- -
1988	31.6	6.6	c	1.3	4.2	1.1	25.0	- -
1989	40.5	15.5	- -	1.2	13.3	1.0	25.0	- -
*75 COATED & PROTECTIVE FABRICS**								
1985	193.0	135.6	- -	10.2	43.9	81.5	57.4	- -
1986	197.2	136.2	- -	11.6	47.0	77.6	61.0	- -
1987	r182.7	119.5	- -	3.8	57.2	58.5	r63.2	- -
1988	r159.9	105.7	- -	3.0	56.1	46.6	r54.2	- -
1989	211.2	158.8	- -	2.8	82.0	74.0	52.4	- -
*63-64 TRANSPORATION FABRIC**								
1985	85.4	74.2	- -	0.8	53.9	19.5	11.2	- -
1986	83.7	72.4	- -	1.0	50.5	20.9	11.3	- -
1987	r98.7	86.9	- -	0.8	53.5	32.6	r11.8	- -
1988	r107.4	97.3	- -	7.6	48.2	41.5	r10.1	- -
1989	118.0	107.5	- -	7.2	43.7	56.6	10.5	- -
*56c NARROW FABRICS**								
1985	105.5	93.0	- -	- -	93.0	c	12.5	- -
1986	122.8	105.3	- -	- -	105.3	- -	17.5	- -
1987	122.3	104.1	- -	- -	104.1	- -	18.2	- -
1988	129.9	112.1	- -	- -	111.4	0.7	17.8	- -
1989	123.7	105.5	0.1	- -	104.4	1.0	18.2	- -
*74 BAGS & BAGGING**								
1985	60.2	55.1	- -	- -	54.5	0.6	5.1	- -
1986	58.3	53.0	- -	- -	52.2	0.8	5.3	- -
1987	r62.9	57.6	- -	0.3	54.8	2.5	r5.3	- -
1988	r62.3	58.3	0.1	0.1	57.6	0.5	r4.0	- -
1989	54.7	50.4	- -	0.1	50.0	0.3	4.3	- -
*MISCELLANEOUS INDUSTRIAL & CONSUMER-TYPE PRODUCTS**								
1985	347.2	245.3	3.6	12.9	88.9	139.9	100.9	1.0
1986	373.8	306.9	3.3	9.4	195.9	98.3	65.8	1.1
1987	r430.5	359.1	- -	18.1	222.1	118.9	r70.3	1.1
1988	r402.9	344.8	3.7	6.8	244.4	89.9	r57.1	1.0
1989	336.3	277.0	7.7	7.4	230.1	31.8	58.3	1.0

*** FOR 1989, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.**

Most of the above data are taken from the Fiber Economics Bureau's publication *Manufactured Fiber Handbook.*

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

GENERAL NOTES FOR END USE TABLES
ON PAGES 207-213

Units are in million pounds.

- -	Little, or none, of the fiber is used.
*	When an asterisk appears, there is a footnote at the end of the table.
a.	This letter in the title of each table refers the reader to these notes.
b.	Manufactured fiber end use in these tables is divided between Artificial (Cellulosic), (rayon+acetate fibers) and Synthetic (Noncellulosic), (nylon, polyester, acrylic & olefin fiber). Yarn includes monofilaments and olefin "yarn" also includes film fiber and spunbonded polypropylene. Staple includes tow & fiberfill; see Item 79a, Fiberfill, Stuffing & Flock and its footnote on page 216. Certain waste quantities, which are tabulated with staple, are included; see text on page 203. The synthetic (noncellulosic) fibers included in this survey, for one or more years, are the acrylic, modacrylic, nylon, olefin (polyethylene & polypropylene), polyester fibers through 1989. 1987- 1989 exclude vinyon fiber.
c.	Less than 50,000 pounds, i.e., nominal.
d.	The staple data are tabulated in the yarn column.
e.	The yarn data are tabulated in the staple column.
r.	This data shows a significant revision compared with the September 1989 ***Fiber Organon*** data.

As described in the footnotes to Items 54a and 54b, apparel linings, pockets and such are tabulated in Items 54a and 54b and not with the applicable garments.

In the Apparel table, the sex and age classifications used are those of the U.S. Census Bureau. Thus **M** means Men's plus Boys' and **W** means all other persons, i.e., Women's, Misses', Juniors', Girls', Children's & Infants'.

NOTES FOR APPAREL ITEMS
PAGES 208-209

For all lettered and general footnotes to this table, see notes above.

40. SHEER HOSIERY:
Includes pantyhose, stockings, body stockings, leotards & tights, sheer knee-highs & anklets and support hose.

19,41. ANKLETS & SOCKS:
Include footsocks, anklets, half-hose, over-the-calf hosiery and nonsheer knee-highs for all ages and both sexes. Also includes infants' and children's waist-highs.

8,29. SWEATERS (MW):
Knitted sweater shirts, scarves, mufflers, gloves, mittens, caps, etc. Pullover, coat & cardigan types, full-fashioned and cut and sewn. Also note Item 57.

57. CRAFT & HANDWORK YARNS:
All yarns for handwork, i.e., knitting, embroidery, crocheting, needlepoint, macramé, crewel and yarn kits for all uses. Does not include sewing thread (Item 72). Olefin yarn for macramé is in Miscellaneous Industrial.

16-18. UNDERWEAR & NIGHTWEAR (M):
Undershirts, shorts & briefs, pajamas, nightshirts, sleepcoats, thermal underwear, etc.

35-39. UNDERWEAR, NIGHTWEAR, BRAS AND FOUNDATIONS:
Underwear and nightwear component includes full and halfslips, panties, petticoats, pettipants, camisoles, vests, briefs and thermal underwear as well as nightgowns, pajamas, sleepcoats, peignoirs, robes, negligees and bedjackets. Also includes bodywear and all children's and infants' underwear & nightwear. **Excludes** the trim, elastic webbing, apparel lace, braid or narrow fabric used in these products.

The bras and foundations include corsets, girdles, combinations and one-piece garments, garter belts, hose supporters, two-way stretch and surgical & maternity foundation garments.

10,31. ROBES & LOUNGEWEAR (MW):
Men's & boys' beach & bathrobes, dressing gowns and smoking jackets, and women's beach & bathrobes and house-breakfast & brunch coats and dressing gowns.

54a. HIGH PILE FABRICS:
Include all applications. End uses such as coatings, collars, linings, backings and paint rollers are included. Napped or brushed fabrics such as fleeces, velvets or corduroys are excluded.

54b. FABRICS FOR LINING:
All manufactured fiber types except high pile fabrics (Item 54a), lining-type fabrics sold as retail piece goods and the lining components of shoes & slippers and luggage and handbags (Miscellaneous Other Consumer-Type). The apparel lining component of this series include main linings, interlinings, zip-in linings (except pile), pocketing and banding as well as the acetate and nylon tricot for laminating. Cotton drapery linings are not included here but are in Item 52. Also not included are interlinings of haircloth, urethane and non-woven fabrics.

43. APPAREL LACE:
Nets and veilings.

56a. NARROW FABRICS: ELASTIC AND NONELASTIC TYPES.
The "narrow woven goods" made by slicing broad woven fabrics are not included. **NARROW FABRIC** quantities for home textiles and industrial uses are shown in those sections.

RETAIL PIECE GOODS:
Are included in Topweight and Bottomweight Fabrics.

TOPWEIGHT FABRICS:
All shirts, blouses, lightweight dress and lightweight fashion fabrics. Fabrics generally weigh 5.0 ounces or less per square yard. Retail piece goods are included.

BOTTOMWEIGHT FABRICS:
Pants, jeans, sportswear, tailored clothing, coats and jackets, career apparel and heavier weight fashion fabrics. Fabrics generally weigh more than 5.0 ounces per square yard. Retail piece goods are included.

OTHER APPAREL:
Men's & women's work gloves and handkerchiefs. Manufactured fiber used for knitted accessories such as scarves, mufflers, gloves, mittens, caps, etc., is in Items 8 & 29.

NOTES FOR HOME TEXTILE ITEMS
PAGES 210-211

For all lettered and general footnotes to this table, see page 214.

HOME TEXTILES:

Data cover the use of each item not only in homes, but also in offices, hotels, institutions, etc. For certain transportation uses, note Items 50a, 63 & 64.

None of the quantities tabulated include any cotton stuffing or filling materials in items such as furniture, pillows, mattresses, comforters & quilts, sleeping bags, seat padding, etc. For the manufactured fibers, however, stuffing & fiberfill is tabulated in the Industrial section. Note text on page 203 regarding the inclusion of certain manufactured fiber waste quantities here. Certain felt quantities are in Item 70.

45. **BEDSPREADS:**
Tailored & throw spreads, both tufted & woven, as well as the backing. **QUILTS:** Comforters and their outer shell, quilted pads are in Item 47.

46. **BLANKETS & BLANKETING:**
Woven, knit, needle-punched and flocked full-size and crib blankets and electric blanket shells, as well as the woven acetate or nylon filament yarn bindings thereof. Sizable quantities of rayon, acrylic, nylon & wool waste are included here.

47. **SHEETS:**
Pillowcases. **OTHER BEDDING:** Outside covers of quilted pads; mattress & mattress pads, civilian cots and sleeping bag shells. Mattress felts are in Item 70. The manufactured staple quantities here are mainly polyester for sheets and rayon & polyester for bed ticking. The manufactured filament is chiefly polyester for bed ticking.

48. **TOWELS & TOWELING:**
Woven hand, bath, dish towels, etc. Nonwoven towels, such as "Handi-wipes" and industrial wiping cloths, are in Item 61. The large cotton waste quantity used in these products is not included.

56b. **NARROW FABRICS:**
Only home textiles applications. See the Apparel and Industrial sections for Narrow Fabrics in those applications.

51. **CURTAINS & DRAPERY:**
Lace and other types (principally woven) i.e., cafe, tiered & cottage, ruffled, shortie drapes and tailored. Also includes the backing & headers of drapery fabrics. The cotton data include cotton drapery linings. Shower curtains are in Other Home Textiles.

52. **UPHOLSTERY:**
Furniture slipcovers and vinyl-coated cotton fabrics for upholstery. The olefin & saran webbing for outdoor furniture is included under Narrow Woven Industrial (Item 56c).

OTHER HOME TEXTILES:
Woven & lace napery, such as tablecloths & napkins, doilies, etc., as well as the cotton in window shades. For the manufactured fibers, it includes insect screening & netting. Wall covering fabric is in Miscellaneous Industrial.

NOTES FOR FLOOR COVERING ITEMS
PAGE 211

For all lettered and general footnotes to this table, see page 214.

50. **CARPETS & RUGS FACE FIBER (TOTAL):**
Sum of 50a & 50b.

50a. **FACE YARNS:**
Tufted, woven, knitted and needle-punched types. Tufted includes broadloom & roll goods, (including carpet tiles) transportation carpet, bath mats, scatter rugs, and "grass." Woven includes carpets such as Axminster, Velvet, Wilton, etc. Knit goods are mainly scatter rugs. Needle-punched are the indoor outdoor carpets. Item 50a does not include braided, hooked or woven twisted paper carpets.

50b. **CARPET BACKING FIBERS:**
The Artificial (Cellulosic) Yarn is industrial rayon used for woven carpet chain warps. The Other Yarn is olefin (monofil+film fiber+spunbonded) and small quantities of nylon & polyester filament yarn. The Other Staple is olefin only. The substantial quantities of jute used as woven primary & secondary carpet backing, as well as the jute yarn used in the warp of woven carpets, are not tabulated in Item 50b. Nor does it include the quantities of wool, hair and jute used in carpet and rug pads and cushions.

NOTES FOR INDUSTRIAL & OTHER CONSUMER -TYPE ITEMS
PAGES 212-213

For all lettered and general footnotes to this table, see page 214.

56c. **NARROW FABRICS:**
Woven labels, industrial webbing, shoelaces, tapes (venetian blinds & industrial), transportation seat belts, auto windlace, channeling & trim, outdoor furniture webs and zipper tapes. These figures exclude transmission & conveyor belting (in Item 67); friction tape and the braided narrow fabric used in electrical applications (in Item 69); and gummed cotton tape (in Item 76).

61. **MEDICAL, SURGICAL & SANITARY:**
Bandages, gauzes, adhesive tapes & plasters, sanitary napkins & tampons, cotton diapers, rayon disposable diapers, surgical gowns and packs. Medical sutures are tabulated in Item 72. Surgical hosiery is in Items 19 & 40. Not included here is cotton waste & linters nor any nontextiles used for filling materials.

63 & 64. **TRANSPORTATION FABRIC:**
Auto seat upholstery & slipcovers, sidewall, headlining and sheeting. The cotton quantities include the knit and woven fabric used as the backing for vinyl sheeting. The item includes convertible auto tops & replacements thereof, as well as upholstery used in other kinds of transportation, such as airplanes, railroad & subway cars, buses, etc. It does not include seat padding, transportation rugs (in Item 50), window channeling (in Item 56c), flocking, tassels, trim, etc. The manufactured fiber used for substrates for automotive fabric is included in Item 75.

Notes for Industrial & Other Consumer-Type Items (Continued)

65. **TIRES:**
All types, i.e., automobile, truck, tractor, off-road, bicycle, etc. The data include tire cord & tire cord fabric, chafer and other tire components, i.e., flippers, liners, bead wrap & breaker strips.

The data include imports of tire yarn, cord & fabric and also cover any quantities subsequently exported in cord or fabric form.

The consumption of steel tire cord for the years 1985-1989 inclusive is estimated as follows: 317.6, 327.0, 349.0, 393.0 & 440.3. However, these quantities are **not included** in Item 65.

66. **HOSE:**
Includes wrapped, knitted, braided and woven products. Does not include braided vacuum cleaner hose.

67. **BELTING:**
Includes flat conveyor & transmission belts (both rubber and nonrubber, and mechanical rubber goods).

69 & 77. **ELECTRICAL APPLICATIONS & REINFORCED PLASTICS:**
The cotton quantities are estimated.

Electrical Applications: Electric wire insulation & covering of all kinds plus friction tape and cable wrap, stuffing & identification. The total fiber consumed does not reflect the increased use of plastic and other nonfibrous coatings, of course.

Reinforced Plastics: High-and low-pressure laminates used in the manufacture of construction materials (corrugated & flat sheet, plumbing accessories, etc.), process equipment (tanks & containers, pipes, ducts, etc.), transportation uses (aircraft, autos, trucks, etc.) and marine, missiles, molded electrical parts, housing, seating, trays, etc. Flexible laminates of cotton are tabulated by end use, e.g., vinyl-supported upholstery fabric in Item 63, etc.

70. **FELTS:**
Wet & dry papermakers' felts, mattress felts and cushioning & wicking felts. Apparel felts (e.g., for shirts) are classified by apparel products. Patio and similar "felts" are in Item 50a. Laundry press pads and flatwork ironer pads are in Miscellaneous Industrial. The wool quantity includes some felts used in filtration (recorded here and not in Item 71), but excludes the substantial amounts used in pressed felts.

71. **FILTRATION:**
Woven and nonwoven filters for wet & dry filtration, including tea bags. The small wool quantity used in the copper refining industry is included in Item 70.

The fiber used in cigarette filtration is **not included** in this end use or in the Industrial Uses totals.

72. **SEWING THREAD:**
Home sewing and industrial & weight goods, as well as medical sutures.

73. **ROPE** (Braided & twisted), **CORDAGE** (under 3/16"), **FISHLINE, ETC:**
Includes hawsers, baler or harvest twine, clothesline, tying twine, etc., as well as fishnets, seines & netting twine.

74. **BAGS & BAGGING:**
Manufactured Other Yarn is nylon mailbags plus olefin leno mesh & close-woven bags, including sandbags; also includes olefin bagging for wool bales. Carpet backing bale wrap is in Other Industrial.

75. **COATED & PROTECTIVE FABRICS:**
For the manufactured fibers, tents & tarpaulins, as well as the substrates for vinyl, rubber or urethane coating, lamination or impregnation. Examples of specific end uses covered include parachutes, deceleration chutes & tow targets, awnings, beach, garden & tractor umbrellas, inflatable dunnage & cushions, air-supported structures & automotive air-spring diaphragms and boat & pool covers.

The cotton quantities include awnings, boat covers, tarpaulins and tents. **Not included** here are the cotton quanities used for vinyl substrates; such quantities are tabulated with their appropriate end use, i.e., transportation upholstery (Items 63 & 64), upholstery (Item 52), etc. Manufactured fiber surfaces for recreational fields are not included in this survey.

76. **PAPER & TAPE REINFORCING:**
Gummed and pressure-sensitive tape, as well as nonwoven bonded structures for paper, tape and ribbon reinforcing.

79a. **FIBERFILL, STUFFING & FLOCK:**
All applications (apparel, home textiles & industrial). Both graded fiber and waste are included. The consumption of polyester staple & tow in fiberfill for the years 1985-1989 inclusive was: 282.5, 294.9, 348.6, 357.2 & 349.5. For the same years, use of polyester waste for stuffing and filling materials was: 50.9, 60.3, 45.3, 50.1 & 56.2.

79b. **UNALLOCATED NONWOVENS:**
All nonwoven quantities remaining after the identifiable nonwoven end uses, such as medical, surgical & sanitary, filtration, coated & protective fabrics, and paper & tape reinforcing, have been calculated.

MISCELLANEOUS INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS:
The cotton for abrasives, book binding, luggage & handbags, shoes & slippers, tobacco cloth, woven wiping cloths and wall-covering fabrics. For rayon, it includes asbestos carrier fiber, laundry supplies and mop yarns. For olefin yarn, it includes agricultural cloth, bale wrap, cable binding, civil engineering fabrics and macramé and other craft yarns.

TABLE 10:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3	1	89	68	83	159						470	150
BRAZIL	26	53	53	74	165	107	82						560	448
CANADA	628	303	171	405	377	432	350						2666	4275
CHILE	0	309	66	44	287	44	111						861	224
GERMANY, FED. REP. OF	422	516	844	684	783	506	528						4283	3871
IRELAND	145	0	36	35	34	36	105						391	388
JAPAN	104	72	111	104	170	164	29						754	908
KOREA, REP. OF	0	22	33	22	29	0	11						117	177
MEXICO	102	4	121	78	100	116	149						670	981
NETHERLANDS	282	264	345	178	275	483	317						2144	1580
UNITED KINGDOM	34	22	60	0	38	52	51						257	676
ALL OTHER COUNTRIES [a]	21	56	22	49	25	42	37						252	745
TOTAL ARTIFICIAL YARN	1831	1624	1863	1762	2351	2065	1929						13425	14423
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493	108	1254	910	2497	1851						7432	2553
CANADA	4973	3854	4391	4333	4128	4049	4139						29867	21719
GERMANY, FED. REP. OF	89	134	257	322	347	243	484						1876	820
JAPAN	143	204	126	131	238	69	176						1087	1607
POLAND	124	171	43	46	0	109	35						528	189
SWEDEN	118	71	49	72	0	4	24						338	76
SWITZERLAND	0	27	0	14	0	0	0						41	503
TAIWAN	354	988	1323	964	1732	1242	1294						7897	728
UNITED KINGDOM	89	93	73	37	162	46	917						1417	716
ALL OTHER COUNTRIES [b]	95	59	91	18	32	866	3074						4235	2597
TOTAL ARTIFICIAL STAPLE+TOW	6304	6094	6461	7191	7549	9125	11994						54718	31508
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0	43	34	9	0	81						167	1604
BELGIUM	776	122	589	594	1384	786	322						4573	1489
BRAZIL	70	71	57	180	118	76	47						619	767
CANADA	3834	2895	4150	3775	4492	3853	4734						27733	20807
COSTA RICA	762	517	497	462	787	470	366						3861	3232
ECUADOR	53	16	67	67	75	34	68						380	413
FRANCE	2007	1305	1065	1378	1223	1302	915						9195	7785
GERMANY, FED. REP. OF	2096	2021	1480	1546	2024	1917	1450						12534	17840
ITALY	892	434	593	905	861	313	755						4753	4631
JAPAN	760	658	505	573	356	622	469						3943	4151
KOREA, REP. OF	31	0	90	20	46	42	72						301	376
MEXICO	1393	900	1607	1396	1145	1967	2063						10471	15839
NETHERLANDS	103	305	921	219	117	195	204						2064	1396
PORTUGAL	62	234	49	42	62	0	0						449	304
SINGAPORE	16	16	0	0	33	0	33						98	107
TAIWAN	791	227	114	818	437	959	315						3661	11365
THAILAND	58	93	95	123	64	65	66						564	623
UNITED KINGDOM	1881	1492	2076	1029	1282	1718	255						9733	10828
ALL OTHER COUNTRIES [c]	351	85	147	79	79	91	122						954	2457
TOTAL SYNTHETIC YARN	15936	11391	14145	13240	14594	14410	12337						96053	106014
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53	11	11	6	14	6						101	105
AUSTRALIA	38	120	30	72	63	106	89						518	482
BELGIUM	1	16	0	158	0	78	15						268	343
CANADA	3703	2439	3082	2325	2156	1402	1950						17057	7908
FRANCE	592	297	769	436	558	364	529						3545	2052
GERMANY, FED. REP. OF	1017	1236	1063	1205	1618	1398	1044						8581	10709
INDIA	1731	1055	4215	0	2528	1752	1810						13091	9702
IRELAND	0	26	0	0	0	84	80						190	1449
ITALY	422	318	534	204	206	176	85						1945	1293
JAPAN	1754	1763	2307	1539	1531	1874	2013						12781	14787
KOREA, REP. OF	1786	1273	1778	2043	3441	4750	4477						19548	29151
MEXICO	3590	2041	2015	2355	3385	1382	932						15700	4681
NETHERLANDS	1	0	57	20	10	20	0						108	496
SPAIN	35	0	0	0	0	93	32						160	418
SWITZERLAND	399	124	87	385	107	280	105						1487	1020
TAIWAN	888	572	931	1400	1476	1215	1458						7940	6587
TURKEY	112	114	0	0	0	0	76						302	256
UNITED KINGDOM	2249	1868	2834	2159	2242	1157	828						13337	13917
ALL OTHER COUNTRIES [d]	549	326	137	92	219	1362	1099						3784	213
TOTAL SYNTHETIC STAPLE+TOW	18867	13641	19850	14404	19546	17507	16628						120443	105569

a. Italy 78, France 34, India 34, Ecuador 33, Taiwan 22, Belgium 20, Uruguay 13, Turkey 12, Thailand 5, Hong Kong 1.

b. Finland 2048, Spain 994, Thailand 646, Yugoslavia 230, Italy 112, France 72, Netherlands 57, China, PRC 40, Mexico 29, Brazil 7.

c. Spain 232, Ireland 159, Turkey 98, Switzerland 84, Paraguay 83, El Salvador 61, Sweden 49, Morocco 47, Austria 44, Hong Kong 42, Finland 22, Yugoslavia 8, Haiti 6, Colombia 5, Greece 5, Honduras 5, Australia 2, Dominican Republic 2.

d. Brazil 2283, Venezuela 395, China, PRC 321, Thailand 209, Sweden 180, Malaysia 136, Romania 86, Hong Kong 64, Denmark 63, Poland 47.

TABLE 11:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208	240	163	110	92	266						1321	1472
TEXTURED	54	8	0	33	32	81	32						240	729
OTHER	1385	1371	1471	1528	2171	1855	1524						11305	11554
MONOFILAMENTS & STRIPS	150	37	152	38	38	37	107						559	668
SUBTOTAL ABOVE	**1831**	**1624**	**1863**	**1762**	**2351**	**2065**	**1929**						**13425**	**14423**
STAPLE	5989	5884	6154	6846	7218	8895	11534						52520	31276
TOW	312	210	307	342	331	230	460						2192	181
TOPS	3	0	0	3	0	0	0						6	51
SUBTOTAL ABOVE	**6304**	**6094**	**6461**	**7191**	**7549**	**9125**	**11994**						**54718**	**31508**
WASTE	**0**	**0**	**0**	**22**	**0**	**88**	**44**						**154**	**400**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856	1437	1000	1336	1220	1207						8491	10487
TEXTURED														
UP TO 450 DENIER	270	333	253	338	520	212	297						2223	2213
OVER 450 DENIER	2936	1350	2132	3039	3721	3074	3821						20073	7925
OTHER	4531	3817	4273	2090	2435	3285	340						20771	28270
MONOFILAMENTS & STRIPS	216	117	148	191	134	164	152						1122	781
SUBTOTAL ABOVE	**9388**	**6473**	**8243**	**6658**	**8146**	**7955**	**5817**						**52680**	**49676**
POLYESTER														
HIGH TENACITY	614	408	506	421	345	457	545						3296	5095
TEXTURED	785	643	626	923	581	1368	1278						6204	11967
POY	719	119	117	758	251	716	206						2886	10898
OTHER	2038	1457	1459	1683	1949	1300	1243						11129	10534
MONOFILAMENTS & STRIPS	53	0	67	40	53	38	57						308	401
SUBTOTAL ABOVE	**4209**	**2627**	**2775**	**3825**	**3179**	**3879**	**3329**						**23823**	**38895**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408	2224	1880	2281	1847	2207						13298	11174
OTHER	277	223	301	276	307	324	410						2118	2616
MONOFILAMENTS & STRIPS	611	660	602	601	681	405	574						4134	3653
SUBTOTAL ABOVE	**2339**	**2291**	**3127**	**2757**	**3269**	**2576**	**3191**						**19550**	**17443**
STAPLE														
NYLON	4048	3037	4055	3032	3267	2179	2715						22333	11199
POLYESTER	9261	5813	9622	6652	12118	11296	10832						65594	60794
ACRYLIC	1711	1729	2063	1586	860	1458	1273						10680	10108
POLYPROPYLENE	543	37	160	27	105	90	173						1135	1258
OTHER	196	190	320	146	151	362	251						1616	3194
TOW														
NYLON	409	308	555	385	603	471	647						3378	2312
POLYESTER	15	70	70	2	26	174	161						518	590
ACRYLIC	2512	1973	2649	2252	2133	1350	513						13382	13285
OTHER	70	5	35	105	135	0	6						356	397
TOPS	102	479	321	217	148	127	57						1451	2432
SUBTOTAL ABOVE	**18867**	**13641**	**19850**	**14404**	**19546**	**17507**	**16628**						**120443**	**105569**
WASTE														
NYLON	2694	2074	1628	1933	1267	1940	2123						13659	13361
POLYESTER	2703	2241	1882	1067	3127	2128	1675						14823	6392
OTHER	444	571	1027	602	838	876	568						4926	3346
TOTAL MANUFACTURED FIBERS ABOVE	**48779**	**37636**	**46856**	**40221**	**49272**	**48139**	**47298**						**318201**	**281013**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59	54	62	59	121	89						559	637
SPUN YARN	427	503	318	594	534	436	436						3248	2835
SPUN YARNS														
SYNTHETIC	2420	2155	2639	1902	2841	2270	1903						16130	33432
ARTIFICIAL	0	0	0	0	0	0	0						0	0
PUT UP FOR RETAIL SALE	32	24	70	34	87	88	106						441	416
GRAND TOTAL ABOVE	**51773**	**40377**	**49937**	**42813**	**52793**	**51054**	**49832**						**338579**	**318333**

SOURCE: U.S. Census Bureau Report IM145X.

TABLE 12:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37	44	6	45	157	260						641	213
TEXTURED	217	9	30	284	101	114	104						859	1576
OTHER	66	106	57	64	46	18	63						420	922
MONOFILAMENTS & STRIPS	97	0	15	11	26	3	9						161	225
SUBTOTAL ABOVE	**472**	**152**	**146**	**365**	**218**	**292**	**436**						**2081**	**2936**
STAPLE	1195	2051	1838	1329	1645	1171	1168						10397	12387
TOPS	333	0	203	187	185	58	0						966	339
SUBTOTAL ABOVE	**1528**	**2051**	**2041**	**1516**	**1830**	**1229**	**1168**						**11363**	**12726**
WASTE	**330**	**407**	**614**	**547**	**603**	**587**	**329**						**3417**	**8329**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357	9332	8892	15463	10230	8865						67896	68177
TEXTURED														
UP TO 450 DENIER	1571	588	626	2098	791	751	644						7069	5071
OVER 450 DENIER	5636	4353	5225	4130	3350	4019	3295						30008	30544
OTHER	2637	2264	3143	2401	2191	2066	1248						15950	14705
MONOFILAMENTS & STRIPS	8	32	93	33	42	35	14						257	1604
SUBTOTAL ABOVE	**17609**	**14594**	**18419**	**17554**	**21837**	**17101**	**14066**						**121180**	**120101**
POLYESTER														
HIGH TENACITY	4308	5166	5459	4737	3944	4664	3644						31922	23836
TEXTURED	3074	3021	4078	3508	3650	4310	1507						23148	20778
POY	1831	2368	1287	1783	2918	1306	749						12242	9778
OTHER	1297	1746	1824	1275	2294	1566	1061						11063	8299
MONOFILAMENTS & STRIPS	185	285	91	93	188	186	116						1144	1665
SUBTOTAL ABOVE	**10695**	**12586**	**12739**	**11396**	**12994**	**12032**	**7077**						**79519**	**62356**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523	549	801	424	434	461						3727	5871
OTHER	2035	2007	2279	2972	4061	1909	1369						16632	10893
MONOFILAMENTS & STRIPS	876	913	1664	1218	1223	1230	831						7955	5596
SUBTOTAL ABOVE	**3446**	**3443**	**4492**	**4991**	**5708**	**3573**	**2661**						**28314**	**22360**
STAPLE														
NYLON	3163	2765	2343	3257	2210	1729	1591						17058	21558
POLYESTER	7157	6405	9490	7701	8861	6382	4256						50252	77048
ACRYLIC	4584	3178	3882	3936	4697	6363	4961						31601	46819
POLYPROPYLENE	2038	1561	2666	3226	2211	2805	2562						17069	13484
OTHER	2688	923	1504	961	1818	1062	802						9758	12418
TOW														
NYLON	121	176	155	304	145	191	152						1244	522
POLYESTER	18	64	0	100	6	52	321						561	2876
ACRYLIC	1710	1787	989	956	1245	1506	2418						10611	11651
OTHER	26	12	15	243	0	679	7						982	807
TOPS	3984	2729	2309	4760	2552	4741	7817						28892	11105
SUBTOTAL ABOVE	**25489**	**19600**	**23353**	**25444**	**23745**	**25510**	**24887**						**168028**	**198288**
WASTE														
NYLON	4117	4250	3894	2746	3957	3139	3630						25733	15248
POLYESTER	3268	2845	2782	3321	2596	1833	1190						17835	27115
OTHER	3343	3700	4979	4352	49[illegible]	6193	3494						31055	48132
TOTAL MANUFACTURED FIBERS ABOVE	**70297**	**63628**	**73459**	**72232**	**784[illegible]**	**71489**	**58938**						**488525**	**517591**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	28	45	32	25	68	13	128						339	324
SPUN YARN	0	0	0	0	0	0	0						0	0
SPUN YARNS														
SYNTHETIC	3007	4304	3749	4278	4103	3890	3415						26746	19482
ARTIFICIAL	0	0	0	0	0	0	0						0	0
PUT UP FOR RETAIL SALE	287	398	641	746	789	715	970						4546	4352
GRAND TOTAL ABOVE	**73619**	**68375**	**77861**	**77281**	**83442**	**76107**	**63451**						**520156**	**541749**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 13:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

	1990												YEAR TO DATE[a]	
ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4	18.1	17.4	16.9	19.1	17.3					136.7	147.7
RAYON STAPLE	30.1	25.3	26.3	28.2	25.1	22.6	24.8	25.0					207.4	254.4
TOTAL ARTIFICIAL (CELLULOSIC)	**45.2**	**40.7**	**43.7**	**46.3**	**42.5**	**39.5**	**43.9**	**42.3**					**344.1**	**402.1**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4	28.4	28.8	27.6	24.9	30.6					223.9	246.6
- CARPET	86.5	81.1	82.2	85.6	80.1	75.8	71.8	88.4					651.5	639.5
- TEXTILE	28.9	28.2	29.9	32.0	32.0	31.3	29.0	31.0					242.3	268.8
POLYESTER - INDUSTRIAL[d]	27.2	28.6	31.8	32.9	30.1	30.2	28.2	29.6					238.6	246.9
- TEXTILE[f]	56.6	56.2	58.0	69.8	68.4	61.4	59.2	69.1					498.7	567.5
OLEFIN[e]	107.2	116.5	116.7	124.2	124.5	122.2	117.4	125.8					954.5	836.9
TOTAL YARN	**331.3**	**340.9**	**347.0**	**372.9**	**363.9**	**348.5**	**330.5**	**374.5**					**2809.5**	**2806.2**
STAPLE+TOW+FIBERFILL														
NYLON	88.8	74.9	86.0	85.0	87.0	77.6	72.2	87.7					659.2	651.2
ACRYLIC+MODACRYLIC	40.4	39.7	43.2	39.7	43.0	43.8	38.6	45.5					333.9	370.1
POLYESTER	168.9	175.7	173.2	182.2	176.3	167.6	156.7	180.3					1380.9	1607.7
OLEFIN	30.3	34.4	35.3	35.1	36.0	37.1	31.4	32.0					271.6	253.6
TOTAL STAPLE	**328.4**	**324.7**	**337.7**	**342.0**	**342.3**	**326.1**	**298.9**	**345.5**					**2645.6**	**2882.6**
TOTAL SYNTHETIC (NONCELLULOSIC)	**659.7**	**665.6**	**684.7**	**714.9**	**706.2**	**674.6**	**629.4**	**720.0**					**5455.1**	**5688.8**
TOTAL MANUFACTURED FIBER	**704.9**	**706.3**	**728.4**	**761.2**	**748.7**	**714.1**	**673.3**	**762.3**					**5799.2**	**6090.9**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8	9.1	7.6	8.7	8.9	8.3					8.3	10.7
RAYON STAPLE	20.2	17.2	14.0	14.2	11.9	10.1	12.4	10.6					10.6	16.3
TOTAL ARTIFICIAL (CELLULOSIC)	**29.9**	**27.1**	**22.8**	**23.3**	**19.5**	**18.8**	**21.3**	**18.9**					**18.9**	**27.0**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4	36.0	30.1	35.7	42.2	36.9					36.9	27.3
- CARPET	60.5	61.2	62.6	63.2	65.4	78.2	82.3	70.2					70.2	59.3
- TEXTILE[f]	57.0	59.9	64.3	63.5	63.5	62.9	62.1	60.2					60.2	54.1
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5	39.2	37.9	35.8	35.6	35.5					35.5	32.3
- TEXTILE[f]	94.5	104.9	109.9	106.4	99.7	100.8	100.2	91.5					91.5	115.7
OLEFIN[e]	68.1	66.6	66.0	63.9	63.8	65.2	63.6	62.6					62.6	60.6
TOTAL YARN	**356.2**	**366.9**	**375.7**	**372.2**	**360.4**	**378.6**	**386.0**	**356.9**					**356.9**	**349.3**
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1	44.3	47.7	60.5	65.3	59.6					59.6	46.9
ACRYLIC+MODACRYLIC	69.5	70.9	72.8	75.3	78.9	83.2	87.0	86.3					86.3	69.3
POLYESTER	193.5	195.1	192.9	217.4	210.8	212.4	216.8	197.1					197.1	233.6
OLEFIN	34.6	33.4	31.5	29.8	28.5	28.6	29.8	29.6					29.6	34.1
TOTAL STAPLE	**337.7**	**339.9**	**334.3**	**366.8**	**365.9**	**384.7**	**398.9**	**372.6**					**372.6**	**383.9**
TOTAL SYNTHETIC (NONCELLULOSIC)	**693.9**	**706.8**	**710.0**	**739.0**	**726.3**	**763.3**	**784.9**	**729.5**					**729.5**	**733.2**
TOTAL MANUFACTURED FIBER	**723.8**	**733.9**	**732.8**	**762.3**	**745.8**	**782.1**	**806.2**	**748.4**					**748.4**	**760.2**
	COTTON CONSUMPTION													
RAW COTTON	317.3	332.1	365.9	327.8	336.8	379.5	293.8						2353.2	2277.1
	WOOL CONSUMPTION[g]													
	1ST QUARTER			2ND QUARTER			3RD QUARTER			4TH QUARTER				
APPAREL CLASS WOOL	31.7			32.4									64.1	69.9
CARPET CLASS WOOL	3.8			3.6									7.4	7.2
TOTAL RAW WOOL	35.5			36.0									**71.5**	**77.1**

---

a. "Year to date" totals for stock, are the latest month's figures.

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

g. **Wool data for 1990 available on a quarterly basis only.**

C3460-1

FIBER ORGANON

Formerly Textile Organon

Volume 61, No. 10 ☐ **October 1990**

A publication of *Fiber Economics Bureau, Inc.*

Highlights

- Mill Consumption in Selected Countries... see page 223.
- Selected U.S. Exports by Country of Destination... see pages 226 - 227.
- U.S. Production of Hosiery... see page 228.
- Quarterly Manufactured Fiber Data... see pages 232 - 233.

SHIPMENTS:

In September, total manufactured fiber shipments reached 748 million pounds, 3% below the 769 million pounds shipped in August and 2% above the 733 million pounds shipped in September 1989.

September shipments of synthetic (noncellulosic) filament yarn fell 2% to 368 million pounds and staple+tow fell 4% to 338 million pounds.

Contributing to the decrease in shipments over the previous month were nylon carpet yarn down 9% or 8 million pounds, acrylic staple+tow down 8% or 3 million pounds and nylon staple down 7% or 6 million pounds.

Year-to-date domestic shipments of manufactured fiber are down 4% and exports are up 2%.

TABLE 1:
TOTAL U.S. MANUFACTURED FIBER SHIPMENTS
MILLION POUNDS & *PERCENT CHANGE*

	1990		% CHG	1989	% CHG	YEAR TO DATE		% CHG YTD
ITEM	SEP	AUG	9/90-8/90	SEP	9/90-9/89	1990	1989	1990-1989
ARTIFICIAL (CELLULOSIC)								
YARN	17.6	17.3	*+1.7*	17.3	*+1.7*	154.3	165.0	*-6.5*
RAYON STAPLE	25.3	25.0	*+1.2*	26.7	*-5.2*	232.7	281.1	*-17.2*
TOTAL ARTIFICIAL (CELL.)	**42.9**	**42.3**	***+1.4***	**44.0**	***-2.5***	**387.0**	**446.1**	***-13.2***
SYNTHETIC (NONCELL.)								
YARN+MONOFILAMENT								
NYLON - INDUSTRIAL	32.5	30.6	*+6.2*	28.6	*+13.6*	256.4	275.2	*-6.8*
- CARPET	80.7	88.4	*-8.7*	88.7	*-9.0*	732.2	728.2	*+0.5*
- TEXTILE [a]	31.9	31.0	*+2.9*	32.7	*-2.4*	274.2	301.5	*-9.1*
POLYESTER - INDUSTRIAL	28.5	29.6	*-3.7*	29.2	*-2.4*	267.1	276.1	*-3.3*
- TEXTILE [a]	65.2	68.9	*-5.4*	58.5	*+11.5*	563.7	626.0	*-10.0*
OLEFIN	128.7	128.2	*+0.4*	107.0	*+20.3*	1085.6	943.9	*+15.0*
TOTAL YARN	**367.5**	**376.7**	***-2.4***	**344.7**	***+6.6***	**3179.2**	**3150.9**	***+0.9***
STAPLE+TOW+FIBERFILL								
NYLON	81.9	87.7	*-6.6*	85.5	*-4.2*	741.1	736.7	*+0.6*
ACRYLIC+MODACRYLIC	42.1	45.5	*-7.5*	44.1	*-4.5*	376.0	414.2	*-9.2*
POLYESTER	179.2	180.0	*-0.4*	182.0	*-1.5*	1559.9	1789.7	*-12.8*
OLEFIN	34.6	36.9	*-6.2*	33.1	*+4.5*	311.1	286.7	*+8.5*
TOTAL STAPLE	**337.8**	**350.1**	***-3.5***	**344.7**	***-2.0***	**2988.1**	**3227.3**	***-7.4***
TOTAL SYNTHETIC (NONCELL.)	**705.3**	**726.8**	***-3.0***	**689.4**	***+2.3***	**6167.3**	**6378.2**	***-3.3***
TOTAL MANUFACTURED FIBER	**748.2**	**769.1**	***-2.7***	**733.4**	***+2.0***	**6554.3**	**6824.3**	***-4.0***
TOTAL SHIPMENTS DIVIDED AS -								
DOMESTIC SHIPMENTS [b]	694.8	724.4	*-4.1*	696.4	*-0.2*	6173.0	6448.8	*-4.3*
EXPORTS [c]	53.4	44.7	*+19.5*	37.0	*+44.3*	381.3	375.5	*+1.5*

a. Includes low denier industrial yarn.
b. Includes olefin exports.
c. Excludes olefin exports.

Fiber Organon

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President & Editor
Rosemarie D. Frick

Publishing Headquarters:
Fiber Economics Bureau, Inc.
101 Eisenhower Parkway
Roseland, NJ 07068
U.S.A.
Telephone: (201) 228-1107
Facsimile: (201) 228-7598

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CONTENTS

Features

Mill Consumption of Manufactured Fiber, Cotton & Wool in Selected Countries 223

U.S. Import/Export Update 224 - 227
- U.S. Manufactured Fiber Imports 224
- U.S. Manufactured Fiber Exports 225
- Selected U.S. Exports by Country of Destination 226-227

U.S Production of Hosiery 228

Industry Regulars

Total U.S. Manufactured Fiber Shipments 221

Monthly U.S. Manufactured Fiber Data 229 - 231
- Imports by Country of Origin 229
- Imports by Fiber 230
- Exports by Fiber 231

Quarterly Manufactured Fiber Data 232 - 233
- Filament Yarn Domestic Shipments 232
- Staple+Tow Domestic Shipments 233

Selected U.S. Monthly Fiber Data 234

TABLE 2:
MILL CONSUMPTION OF MANUFACTURED FIBER, COTTON & WOOL IN SELECTED COUNTRIES
MILLION POUNDS & *PERCENT*

	GRAND TOTAL		COTTON		WOOL		MANUF. FIBERS		MANUFACTURED FIBER DETAIL							
									ARTIFICIAL (CELL.)				SYNTHETIC (NONCELL.)			
									TOTAL		YARN	STAPLE	TOTAL		YARN	STAPLE
YEAR	LBS	%[a]	LBS	%[a]	LBS	%[a]	LBS	%[a]	LBS	%[a]	LBS	LBS	LBS	%[a]	LBS	LBS
U.S.A[b]																
1982	9263	*100*	2479	*26.8*	130	*1.4*	6654	*71.8*	522	*5.6*	206	316	6132	*66.2*	2918	3214
1983	10954	*100*	2796	*25.5*	163	*1.5*	7995	*73.0*	599	*5.5*	242	357	7396	*67.5*	3434	3962
1984	10621	*100*	2668	*25.1*	163	*1.5*	7790	*73.4*	588	*5.6*	228	360	7202	*67.8*	3399	3803
1985	10967	*100*	2796	*25.5*	135	*1.2*	8036	*73.3*	546	*5.0*	201	345	7490	*68.3*	3664	3826
1986	11920	*100*	3302	*27.7*	165	*1.4*	8453	*70.9*	608	*5.1*	209	399	7845	*65.8*	3747	4098
1987	12767	*100*	3737	*29.3*	168	*1.3*	8862	*69.4*	586	*4.6*	180	406	8276	*64.8*	3927	4349
1988	12644	*100*	3470	*27.5*	156	*1.2*	9018	*71.3*	613	*4.8*	200	413	8405	*66.5*	4046	4359
1989	13067	*100*	3937	*30.1*	154	*1.2*	8976	*68.7*	600	*4.6*	213	387	8376	*64.1*	4094	4282
CANADA[c]																
1982	442	*100*	88	*19.9*	12	*2.7*	342	*77.4*	63	*14.3*	DETAIL NOT AVAILABLE		279	*63.1*	DETAIL NOT AVAILABLE	
1983	560	*100*	121	*21.6*	15	*2.7*	424	*75.7*	60	*10.7*			364	*65.0*		
1984	579	*100*	121	*20.9*	14	*2.4*	444	*76.7*	59	*10.2*			385	*66.5*		
1985	595	*100*	106	*17.8*	16	*2.7*	473	*79.5*	53	*8.9*			420	*70.6*		
1986	686	*100*	119	*17.3*	18	*2.7*	549	*80.0*	69	*10.0*			480	*70.0*		
1987	661	*100*	95	*14.4*	15	*2.3*	551	*83.3*	51	*7.7*			500	*75.6*		
1988	651	*100*	92	*15.3*	14	*2.1*	545	*82.6*	49	*7.5*			496	*76.2*		
1989	DATA NOT AVAILABLE															
JAPAN[d]																
1982	4656	*100*	1580	*33.9*	249	*5.4*	2827	*60.7*	530	*11.4*	152	378	2297	*49.3*	1165	1132
1983	4669	*100*	1573	*33.7*	227	*4.8*	2869	*61.5*	531	*11.4*	137	394	2338	*50.1*	1197	1141
1984	4775	*100*	1527	*32.0*	252	*5.3*	2996	*62.7*	550	*11.5*	145	405	2446	*51.2*	1253	1193
1985	4706	*100*	1487	*31.6*	263	*5.6*	2956	*62.8*	535	*11.4*	143	392	2421	*51.4*	1236	1185
1986	4675	*100*	1646	*35.2*	244	*5.2*	2785	*59.6*	508	*10.9*	136	372	2277	*48.7*	1169	1108
1987	4805	*100*	1646	*34.3*	271	*5.6*	2888	*60.1*	463	*9.6*	134	329	2425	*50.5*	1234	1191
1988	4889	*100*	1673	*34.2*	271	*5.6*	2945	*60.2*	464	*9.5*	141	323	2481	*50.7*	1320	1161
1989	4952	*100*	1599	*32.3*	269	*5.5*	3084	*62.2*	463	*9.3*	148	315	2621	*52.9*	1434	1187
EEC[e]																
1982	6967	*100*	1943	*27.9*	827	*11.9*	4197	*60.2*	921	*13.2*	282	639	3276	*47.0*	1320	1956
1983	7246	*100*	1960	*27.0*	815	*11.3*	4471	*61.7*	911	*12.6*	274	637	3560	*49.1*	1398	2162
1984	8918	*100*	2508	*28.1*	927	*10.4*	5483	*61.5*	1089	*12.2*	321	768	4394	*49.3*	1693	2701
1985	9299	*100*	2505	*26.9*	936	*10.1*	5858	*63.0*	1150	*12.4*	361	789	4708	*50.6*	1799	2909
1986	9546	*100*	2656	*27.8*	936	*9.8*	5954	*62.4*	1127	*11.8*	351	776	4827	*50.6*	1854	2973
1987	10151	*100*	3069	*30.2*	976	*9.7*	6106	*60.1*	1107	*10.9*	339	768	4999	*49.2*	1915	3084
1988	10117	*100*	2854	*28.2*	954	*9.5*	6309	*62.3*	1267	*12.5*	368	899	5042	*49.8*	2028	3014
1989	DATA NOT AVAILABLE															
TAIWAN[f]																
1982	2005	*100*	558	*27.8*	37	*1.9*	1410	*70.3*	DETAIL NOT AVAILABLE							
1983	2309	*100*	597	*25.9*	40	*1.7*	1672	*72.4*								
1984	2656	*100*	644	*24.2*	42	*1.6*	1970	*74.2*								
1985	3150	*100*	950	*30.2*	32	*1.0*	2168	*68.8*								
1986	3652	*100*	970	*26.6*	53	*1.4*	2629	*72.0*								
1987	3802	*100*	892	*23.5*	58	*1.5*	2852	*75.0*								
1988	3702	*100*	864	*23.3*	45	*1.3*	2793	*75.4*								
1989	3634	*100*	672	*18.5*	46	*1.3*	2916	*80.2*								

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a. The percentages in these columns show the share of each fiber in the specified year. They add to the 100% shown in each of the Grand Total Columns.

b. Mill Consumption is taken from pages 72 and 73 of the 1990 April ***Fiber Organon.*** Glass and Other Fibers are excluded.

c. Mill Consumption is taken from page 95 of the 1990 May ***Fiber Organon.***

d. **Source:** Manufactured: Ministry of Trade and Information (MITI)
Cotton: Secretariat of the International Cotton Advisory Committee (raw fiber equivalent)
Wool: Commonwealth Secretariat International Wool Textile Organization

e. **Source:** C.I.R.F.S. The EEC Countries in this table are: Belgium, France, Italy, Luxembourg, Netherlands, Germany, Fed. Rep. of and the U.K.

f. **Source:** Manufactured: Taiwan Man-Made Fiber Industries Association
Cotton: Secretariat of the International Cotton Advisory Committee (raw fiber equivalent)
Wool: Commonwealth Secretariat International Wool Textile Organization

TABLE 3:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	THOUSAND POUNDS		THOUSAND DOLLARS	
	1989	6 MOS. 1990	1989	6 MOS. 1990
ARTIFICIAL (CELLULOSIC) FIBER				
FILAMENT YARN				
HIGH TENACITY	2456	1055	6366	3150
TEXTURED	1380	208	1776	319
OTHER	21400	9781	42097	21245
MONOFILAMENTS & STRIPS	1022	452	2089	670
SUBTOTAL ABOVE	**26258**	**11496**	**52328**	**25384**
STAPLE	53140	40986	50107	45398
TOW	800	1732	1004	2317
TOPS	55	6	148	8
SUBTOTAL ABOVE	**53995**	**42724**	**51259**	**47723**
WASTE	**574**	**110**	**206**	**49**
SYNTHETIC (NONCELLULOSIC) FIBERS				
FILAMENT YARN				
NYLON				
HIGH TENACITY	19511	7284	36494	15600
TEXTURED				
UP TO 450 DENIER	3550	1926	8844	5093
OVER 450 DENIER	14098	16252	16308	21830
OTHER	47182	20431	77096	37839
MONOFILAMENTS & STRIPS	1303	970	4983	3717
SUBTOTAL ABOVE	**85644**	**46863**	**143725**	**84079**
POLYESTER				
HIGH TENACITY	7810	2751	11120	3997
TEXTURED	18939	4926	20716	6169
POY	16274	2680	13290	2331
OTHER	18931	9886	30409	17159
MONOFILAMENTS & STRIPS	737	251	1642	715
SUBTOTAL ABOVE	**62691**	**20494**	**77177**	**30371**
OTHER SYNTHETIC FILAMENT				
TEXTURED	19246	11091	21603	11920
OTHER	7774	1708	22532	4098
MONOFILAMENTS & STRIPS	6890	3560	23405	19868
SUBTOTAL ABOVE	**33910**	**16359**	**67540**	**35886**
STAPLE				
NYLON	21711	19618	29771	24215
POLYESTER	117697	54762	84212	33947
ACRYLIC	17937	9407	19176	9409
POLYPROPYLENE	2093	962	1942	1002
OTHER	4373	1365	6558	2656
TOW				
NYLON	4493	2731	4930	2982
POLYESTER	969	357	1185	474
ACRYLIC	19583	12869	23618	13618
OTHER	584	350	630	428
TOPS	2977	1394	6027	2597
SUBTOTAL ABOVE	**192417**	**103815**	**178049**	**91328**
WASTE				
NYLON	23982	11536	7826	4086
POLYESTER	17038	13148	4766	3661
OTHER	7001	4358	1744	1150
TOTAL MANUFACTURED FIBERS ABOVE	**503510**	**270903**	**584620**	**323717**
OTHER MFRD. FIBER YARN & THREAD				
SEWING THREAD				
FILAMENT	1375	470	7184	3257
SPUN YARN	5129	2812	15736	9257
SPUN YARNS				
SYNTHETIC	48773	14227	80416	25633
ARTIFICIAL	0	0	0	0
PUT UP FOR RETAIL SALE	591	335	2696	1578
GRAND TOTAL ABOVE	**559378**	**288747**	**690652**	**363442**

SOURCE: U.S. Census Bureau Report IM146.

TABLE 4:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	THOUSAND POUNDS		THOUSAND DOLLARS	
	1989	6 MOS. 1990	1989	6 MOS. 1990
ARTIFICIAL (CELLULOSIC) FIBER				
FILAMENT YARN				
HIGH TENACITY	956	381	1764	688
TEXTURED	1977	755	2198	1319
OTHER	974	357	1477	967
MONOFILAMENTS & STRIPS	362	152	637	292
SUBTOTAL ABOVE	**4269**	**1645**	**6076**	**3266**
STAPLE	19196	9229	18713	9157
TOPS	895	966	269	321
SUBTOTAL ABOVE	**20091**	**10195**	**18982**	**9478**
WASTE	**11554**	**3088**	**5132**	**1501**
SYNTHETIC (NONCELLULOSIC) FIBERS				
FILAMENT YARN				
NYLON				
HIGH TENACITY	108014	59031	154954	82257
TEXTURED				
UP TO 450 DENIER	9182	6425	35982	31248
OVER 450 DENIER	50037	26713	92442	50629
OTHER	25207	14702	57969	34366
MONOFILAMENTS & STRIPS	1908	243	3345	807
SUBTOTAL ABOVE	**194348**	**107114**	**344692**	**199307**
POLYESTER				
HIGH TENACITY	39124	28278	50197	36456
TEXTURED	33544	21641	45252	29302
POY	16687	11493	21369	10672
OTHER	10354	10002	15841	12322
MONOFILAMENTS & STRIPS	3187	1028	6648	2435
SUBTOTAL ABOVE	**102896**	**72442**	**139307**	**91187**
OTHER SYNTHETIC FILAMENT				
TEXTURED	9165	3266	15393	7961
OTHER	20443	15263	84570	41151
MONOFILAMENTS & STRIPS	8874	7124	27904	26086
SUBTOTAL ABOVE	**38482**	**25653**	**127867**	**75198**
STAPLE				
NYLON	32261	15467	38497	18598
POLYESTER	111985	45996	87131	28872
ACRYLIC	73604	26640	54364	17483
POLYPROPYLENE	27344	14507	24140	16238
OTHER	19593	8956	62761	22862
TOW				
NYLON	992	1092	2375	2077
POLYESTER	4244	240	6650	347
ACRYLIC	18532	8193	16092	8034
OTHER	1398	975	3117	1205
TOPS	32592	21075	35676	19491
SUBTOTAL ABOVE	**322545**	**143141**	**330803**	**135207**
WASTE				
NYLON	29594	22103	12816	10837
POLYESTER	41872	16645	18927	7011
OTHER	69923	27561	25073	11265
TOTAL MANUFACTURED FIBERS ABOVE	**835574**	**429587**	**1029675**	**544257**
OTHER MFRD. FIBER YARN & THREAD				
SEWING THREAD				
FILAMENT	732	211	3278	1172
SPUN YARN	0	0	0	0
SPUN YARNS				
SYNTHETIC	36078	23331	60269	38167
ARTIFICIAL	0	0	0	0
PUT UP FOR RETAIL SALE	7985	3576	13662	10621
GRAND TOTAL ABOVE	**880369**	**456705**	**1106884**	**594217**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 5:
SELECTED U.S. EXPORTS BY COUNTRY OF DESTINATION
THOUSAND POUNDS

	A. ARTIFICIAL (CELL.) YARN, MONOFIL & STRIPS			B. SYNTHETIC (NONCELL.) TEXTILE YARN			C. SYNTHETIC (NONCELL.) INDUSTRIAL YARN, MONOFIL & STRIPS			D. ARTIFICIAL (CELL.) STAPLE+TOW			E. SYNTHETIC (NONCELL.) STAPLE+TOW		
COUNTRY	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990
AUSTRIA	0	0	0	1	0	0	111	56	508	0	0	0	105	5	19
BELGIUM/ LUXEMBOURG	1638	10	0	12286	9164	6311	29558	35509	22138	2028	1503	1277	9656	12913	6441
DENMARK	0	0	0	911	375	21	176	3547	742	0	1	0	1920	112	2
FINLAND	0	0	0	156	308	544	1283	651	0	2	0	0	405	319	132
FRANCE	47	13	41	2912	784	336	1178	1973	1411	149	40	23	3100	1150	269
GERMANY, FED. REP. OF	174	362	209	1782	4220	2506	2796	6335	5002	121	76	123	5531	2700	475
GREECE	0	0	0	110	19	73	54	53	42	23	0	0	51	49	2
ICELAND	0	0	0	0	0	0	0	119	72	0	0	0	229	17	39
IRELAND	0	86	223	1635	1475	2744	739	2969	1331	235	795	0	1921	365	529
ITALY	210	9	7	599	972	941	1489	988	4866	27	149	72	9617	1388	2053
NETHERLANDS	3	594	208	1012	826	165	1040	4717	3628	6	14	7	8645	6523	936
NORWAY	0	0	0	51	0	1	39	70	69	42	0	0	478	17	16
PORTUGAL	0	+	0	636	219	339	2	734	2133	0	0	0	32	45	150
SPAIN	1	0	20	6587	4813	3436	397	3598	3964	10	0	0	5201	2072	1010
SWEDEN	30	0	0	194	109	105	1629	1682	1042	11	0	0	2654	1219	156
SWITZERLAND	0	0	0	16	10	0	54	356	100	13	0	0	2658	254	52
TURKEY	0	0	0	5730	2773	654	31732	32106	9170	0	14	0	8266	222	105
UNITED KINGDOM	71	38	155	8575	6279	2673	7935	10006	6482	268	465	76	6585	5125	1715
OTHER	0	0	0	5	0	0	7	+	578	0	0	0	0	0	482
TOTAL WESTERN EUROPE	2174	1112	861	43198	32348	20849	80219	105469	63278	2935	3057	1578	67052	34495	14583
CZECHOSLOVAKIA	0	0	0	0	0	0	1592	226	139	0	0	0	675	1649	60
GERMANY, DEM. REP.	0	0	0	1	168	0	0	0	0	0	0	0	5	0	0
HUNGARY	516	0	0	0	5	0	0	21	0	0	0	0	0	1049	0
POLAND	0	1009	177	459	106	0	14	220	14	0	0	0	14639	6406	589
U.S.S.R.	0	84	0	0	0	2341	96	821	257	0	0	0	0	133	0
YUGOSLAVIA	0	0	0	0	18	0	0	354	0	0	0	0	0	0	19
OTHER	0	0	0	0	0	0	8	48	0	0	0	0	0	0	0
TOTAL EASTERN EUROPE	516	1093	177	460	297	2341	1710	1690	410	0	0	0	15319	9237	668
CANADA	1925	319	316	36708	34940	23628	12470	15947	14923	663	1616	1277	75933	61113	30106
ARGENTINA	0	325	14	83	186	98	76	248	141	0	5	0	408	534	28
BOLIVIA	0	0	0	69	36	0	15	10	0	0	0	0	34	38	0
BRAZIL	45	55	28	1273	48	0	1797	2796	1382	3	30	0	1038	1571	1647
CHILE	11	3	6	86	521	261	132	197	212	131	76	0	15398	10036	6133
COLOMBIA	0	46	24	141	171	205	2667	1107	980	1773	3613	998	4452	5606	3242
COSTA RICA	0	0	0	1052	759	95	197	902	357	7	0	4	4410	7521	5288
DOMINICAN REPUBLIC	40	2	2	1412	678	364	95	1039	457	16	17	2	284	607	378
ECUADOR	0	5	1	717	161	524	33	725	391	115	134	202	8494	5987	3338
EL SALVADOR	0	0	0	120	195	75	331	272	25	1138	162	0	7200	10899	6242
GUATEMALA	0	0	0	1370	1100	507	5	426	33	119	0	107	7509	7596	3216
HAITI	0	0	0	232	112	44	5	76	1	3	0	0	1	53	0
HONDURAS	2	0	0	279	165	84	11	115	162	0	0	0	1792	2566	1634
JAMAICA	0	0	0	516	10	7	78	967	417	0	0	0	49	314	18
LEEWARD & WINDWARD ISL.	0	0	0	2	0	0	0	0	0	0	0	0	8	0	0
MEXICO	227	325	140	3106	3299	1924	4332	5659	3146	13119	7510	7361	19528	37110	18374
PANAMA	14	0	0	143	8	0	59	87	10	0	1	0	16	12	47
PARAGUAY	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0
PERU	0	0	0	80	1960	330	156	173	180	214	87	44	7	5	255
TRINIDAD	0	0	35	57	65	21	4	42	4	0	0	0	6	36	4
URUGUAY	0	0	0	54	4	0	1	78	214	0	0	0	522	431	206
VENEZUELA	70	3	0	1808	221	62	826	412	257	2433	947	48	2707	418	1763
OTHER	19	1	0	183	13	15	6	194	8	2	0	0	67	70	54
TOTAL OTHER AMERICAS	428	765	250	12783	9712	4616	10851	15525	8377	19073	12582	8766	73928	91410	51867

See footnotes opposite.

TABLE 5:
SELECTED U.S. EXPORTS BY COUNTRY OF DESTINATION *(CONTINUED)*
THOUSAND POUNDS

	A. ARTIFICIAL (CELL.) YARN, MONOFIL & STRIPS			B. SYNTHETIC (NONCELL.) TEXTILE YARN			C. SYNTHETIC (NONCELL.) INDUSTRIAL YARN, MONOFIL & STRIPS			D. ARTIFICIAL (CELL.) STAPLE+TOW			E. SYNTHETIC (NONCELL.) STAPLE+TOW		
COUNTRY	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990	1988	1989	6 MOS. 1990
HONG KONG	5	+	15	373	139	64	501	1382	479	483	440	0	11170	6150	4908
INDIA	85	0	0	182	8	2	3171	2932	807	278	0	0	1320	1435	889
INDONESIA	0	0	0	79	175	0	7809	18371	9137	45	+	840	519	1268	1445
KOREA, REP. OF	2000	42	6	1462	400	167	2151	1844	2230	288	28	9	13731	21999	11239
MALAYSIA	13	0	0	1	85	0	10	27	20	33	88	0	278	72	0
PAKISTAN	0	0	0	370	86	0	67	523	126	0	0	556	587	637	323
PHILIPPINES	23	3	0	334	694	66	777	652	248	7	30	9	5290	6395	138
SINGAPORE	0	+	0	2	10	120	959	532	364	3	0	0	129	15	72
TAIWAN	999	1	0	596	136	618	4679	5370	2141	354	37	70	23674	27324	7349
THAILAND	35	0	0	105	188	70	344	742	653	0	36	0	3141	3565	1078
TOTAL OTHER ASIA	3160	46	21	3504	1921	1107	20468	32375	16205	1491	659	1484	59839	68860	27441
CHINA, PRC	3460	778	0	6586	9002	932	2132	2557	1449	44	1757	0	84557	34497	5223
JAPAN	78	0	5	10464	6545	3982	17964	20101	8336	219	168	14	7011	8054	6611
ALGERIA	0	0	0	82	0	385	5	0	157	13	0	0	0	0	0
AUSTRALIA	745	11	15	14406	13721	5793	2009	11831	6502	79	181	13	8839	2423	3173
CAMEROON	0	0	0	118	12	23	0	0	0	0	0	0	0	75	0
EGYPT	0	0	0	315	2067	1324	150	227	1531	0	0	0	931	4770	2084
IRAQ	0	0	0	831	325	0	0	0	0	0	0	0	0	0	0
ISRAEL	55	32	0	1455	1400	0	6440	5900	0	5	38	0	885	721	0
JORDAN	0	0	0	55	34	32	0	29	123	0	0	0	0	31	0
KENYA	0	0	0	0	0	0	0	0	0	0	0	0	0	208	43
LEBANON	0	0	0	230	36	0	157	37	1820	0	0	0	0	14	0
MOROCCO	0	0	0	2030	1248	492	16	2279	5487	0	0	31	716	402	45
NEW ZEALAND	44	4	0	1145	1217	256	175	1441	707	10	33	0	318	251	71
NIGERIA	0	0	0	251	310	3	76	0	31	0	0	0	308	7	0
QATAR	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SAUDI ARABIA	0	21	0	2113	1572	475	54	386	10	14	0	0	543	589	204
SOUTH AFRICA	72	1	0	1055	436	10	182	1062	6102	9	0	32	2918	4523	972
SYRIA	0	0	0	3019	1000	3002	159	158	36	0	0	0	0	31	0
TUNISIA	0	0	0	404	152	35	1	14	0	0	0	0	0	43	0
UNITED ARAB EMIRATES	0	0	0	14	45	0	0	2	67	0	0	0	3	75	5
OTHER	0	87	0	612	277	253	1	81	120	0	0	0	0	718	46
TOTAL M.E., A., & O..	916	156	15	28135	23852	12083	9426	23447	22693	130	252	76	15461	14879	6643
GRAND TOTAL	12657	4269	1645	141838	118615	69538	155240	217111	135671	24555	20091	10196	399100	322545	143141

SOURCE: U.S. Census Bureau Report EM546.

+ Less than 1 thousand pounds

For 1988 the commodity numbers are :

A. 309.0110, .2210, 310.0006 & .0026.
B. 310.0008, .0009, .0010, .0014, .0029, .0034, .0040 & .0044.
C. 309.0120, .0140, .0170, .2220, .2270, 310.0027 & .0032.
D. 309.4219 & .4222.
E. 309.3220, .3240, .3250, .3255, .4240, .4242, .4245, .4246 & .4247.

For 1989 & 1990 the Harmonized Tariff Schedule numbers are:

A 5403.10.00.00, 5403.10.30.20, 5403.10.30.40, 5403.10.60.00, 5403.20.00.00, 5403.20.30.00, 5403.20.60.00, 5403.31.10.00 - 5403.39.00.40, 5403.41.00.00 - 5403.49.00.00, 5405.00.30.00 & 5405.00.60.00.
B. 5402.31.00.00, 5402.31.30.00, 5402.31.60.00, 5402.32.00.00, 5402.32.20.00, 5402.32.60.00, 5402.33.00.00, 5402.33.30.00, 5402.33.60.00, 5402.42.00.00, 5402.39.00.00, 5402.39.30.00, 5402.39.30.10, 5402.39.30.90, 5402.39.60.00, 5402.39.60.10 & 5402.39.60.90.
C. 5402.10.00.00, 5402.10.30.20, 5402.10.30.40, 5402.10.60.00, 5402.41.00.20, 5402.41.00.30, 5402.41.00.40, 5402.41.00.60, 5402.51.00.00, 5402.61.00.00, 5404.10.20.20, 5402.20.00.00, 5402.20.30.20, 5402.20.30.40, 5402.20.60.00, 5402.43.00.20, 5402.43.00.30, 5402.43.00.40, 5402.43.00.60, 5402.52.00.00, 5402.62.00.00, 5404.10.20.40, 5402.49.00.10, 5402.49.00.30, 5402.49.00.60, 5402.49.00.80, 5402.49.40.00, 5402.59.00.00, 5402.69.00.00, 5404.10.10.00, 5404.10.20.90 & 5404.90.00.00.
D. 5504.10.00.00, 5504.90.00.00 & 5507.00.00.00.
E. 5503.10.00.00, 5503.20.00.00, 5503.30.00.00, 5503.40.00.00, 5503.90.00.00, 5501.10.00.00, 5501.20.00.00, 5501.30.00.00, 5501.90.00.00, 5506.10.00.00, 5506.20.00.00, 5506.30.00.00 & 5506.90.00.00.

TABLE 6:
U.S. PRODUCTION OF HOSIERY, 1980 -1989

MILLION DOZEN PAIRS

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
WOMEN'S										
PANTYHOSE - SHEER	57.3	59.6	58.5	64.0	67.1	57.9	57.3	53.7	51.9	46.2
- ELASTOMER	36.7	39.0	43.2	47.6	39.4	49.0	52.0	56.0	64.7	65.9
- OTHER[a]	2.0	2.4	3.4	5.0	7.4	7.3	8.8	10.2	8.6	7.5
SUBTOTAL PANTYHOSE	**96.0**	**101.0**	**105.1**	**116.6**	**113.9**	**114.2**	**118.1**	**119.9**	**125.2**	**119.6**
STOCKINGS - NONSTRETCH	2.0	1.8	1.5	1.5	1.3	1.2	1.3	1.6	1.2	1.7
- STRETCH	2.4	2.1	2.4	2.7	2.5	2.2	1.8	2.2	2.2	2.8
- SUPPORT	0.7	0.6	0.5	0.6	0.4	0.4	0.3	0.4	0.3	0.6
- OTHER	0.1	0.1	0.1	+	+	0.1	0.1	+	0.1	+
SUBTOTAL STOCKINGS	**5.2**	**4.6**	**4.5**	**4.8**	**4.2**	**3.9**	**3.5**	**4.2**	**3.8**	**5.1**
SHEER KNEE-HIGHS & ANKLETS	38.4	42.6	38.1	40.3	44.0	42.2	45.3	42.8	40.9	42.2
TOTAL WOMEN'S	**139.6**	**148.2**	**147.7**	**161.7**	**162.1**	**160.3**	**166.9**	**166.9**	**169.9**	**166.9**
MEN'S (SIZES 10 and up)										
ANKLETS & FOOTSOCKS	27.9	27.8	27.1	27.2	26.8	26.0	26.6	26.9	24.1	24.9
MID-CALF	17.4	19.9	17.3	17.8	17.7	17.6	19.6	18.9	21.9	22.5
KNEE-HIGHS	17.8	20.7	17.6	21.5	23.9	23.8	21.5	18.4	21.2	20.6
TOTAL MEN'S	**63.1**	**68.4**	**62.0**	**66.5**	**68.4**	**67.4**	**67.7**	**64.2**	**67.2**	**68.0**
GIRLS', BOYS' & WOMEN'S (SIZES 8 -11)										
ANKLETS	12.5	14.6	11.9	17.3	19.5	19.4	27.4	29.1	29.8	37.8
KNEE-HIGHS	24.3	29.8	23.4	25.7	20.2	17.0	13.7	11.4	11.1	8.9
MID-CALF/CREW	3.1	4.5	4.0	4.9	4.5	6.2	8.2	12.1	14.9	19.4
WAIST-HIGHS	0.3	0.5	0.5	0.5	0.5	0.6	0.5	0.7	0.7	0.7
FOOTSOCKS	8.6	9.4	6.5	5.8	5.2	6.1	6.4	5.9	4.6	3.4
TOTAL GIRLS', BOYS' & WOMEN'S	**48.8**	**58.8**	**46.3**	**54.2**	**49.9**	**49.3**	**56.2**	**59.2**	**61.1**	**70.2**
INFANTS' & CHILDREN'S (SIZES 3 - 8 1/2)										
ANKLETS	19.3	20.5	16.1	16.5	15.5	14.2	16.6	16.9	17.0	21.4
KNEE-HIGHS	6.6	7.7	6.7	7.0	5.8	4.6	3.5	3.3	3.9	3.4
MID-CALF	1.3	1.2	1.4	1.4	3.6	5.7	6.7	7.9	10.8	14.9
WAIST-HIGHS & FOOTSOCKS	1.6	1.8	1.6	2.1	2.3	1.8	1.6	1.5	1.7	1.5
TOTAL INFANTS' & CHILDREN'S	**28.8**	**31.2**	**25.8**	**27.0**	**27.2**	**26.3**	**28.4**	**29.6**	**33.4**	**41.2**
TOTAL HOSIERY	**280.3**	**306.6**	**281.8**	**309.4**	**307.6**	**303.3**	**319.2**	**319.9**	**331.6**	**346.3**

SOURCE: National Association of Hosiery Manufactures - ***1989 Hosiery Statistics.***

+ Less than 100 thousand dozen pairs.

[a] Includes opaque hosiery, which is defined as hosiery knit on 370 needles or more, using leg yarn 30 denier or coarser.

TABLE 7:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3	1	89	68	83	159	69					539	150
BRAZIL	26	53	53	74	165	107	82	83					643	514
CANADA	628	303	171	405	377	432	350	555					3221	4912
CHILE	0	309	66	44	287	44	111	0					861	224
GERMANY, FED. REP. OF	422	516	844	684	783	506	528	557					4840	4802
IRELAND	145	0	36	35	34	36	105	0					391	457
JAPAN	104	72	111	104	170	164	29	117					871	909
KOREA, REP. OF	0	22	33	22	29	0	11	0					117	180
MEXICO	102	4	121	78	100	116	149	171					841	1122
NETHERLANDS	282	264	345	178	275	483	317	444					2588	1999
UNITED KINGDOM	34	22	60	0	38	52	51	64					321	716
ALL OTHER COUNTRIES [a]	21	56	22	49	25	42	37	87					339	832
TOTAL ARTIFICIAL YARN	1831	1624	1863	1762	2351	2065	1929	2147					15572	16907
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493	108	1254	910	2497	1851	2076					9508	3121
CANADA	4973	3854	4391	4333	4128	4049	4139	3767					33634	25859
GERMANY, FED. REP. OF	89	134	257	322	347	243	484	760					2636	999
JAPAN	143	204	126	131	238	69	176	144					1231	1668
POLAND	124	171	43	46	0	109	35	0					528	189
SWEDEN	118	71	49	72	0	4	24	199					537	115
SWITZERLAND	0	27	0	14	0	0	0	41					82	510
TAIWAN	354	988	1323	964	1732	1242	1294	1576					9473	904
UNITED KINGDOM	89	93	73	37	162	46	917	1116					2533	851
ALL OTHER COUNTRIES [b]	95	59	91	18	32	866	3074	2860					7095	2819
TOTAL ARTIFICIAL STAPLE+TOW	6304	6094	6461	7191	7549	9125	11994	12539					67257	37035
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0	43	34	9	0	81	26					193	1605
BELGIUM	776	122	589	594	1384	786	322	457					5030	2174
BRAZIL	70	71	57	180	118	76	47	14					633	958
CANADA	3834	2895	4150	3775	4492	3853	4734	5215					32948	24387
COSTA RICA	762	517	497	462	787	470	366	294					4155	3747
ECUADOR	53	16	67	67	75	34	68	34					414	446
FRANCE	2007	1305	1065	1378	1223	1302	915	495					9690	8584
GERMANY, FED. REP. OF	2096	2021	1480	1546	2024	1917	2195	2261					15540	19828
ITALY	892	434	593	905	861	313	755	313					5066	5157
JAPAN	760	658	505	573	356	622	469	615					4558	5261
KOREA, REP. OF	31	0	90	20	46	42	72	39					340	376
MEXICO	1393	900	1607	1396	1145	1967	2063	1966					12437	18645
NETHERLANDS	103	305	921	219	117	195	231	209					2300	1500
PORTUGAL	62	234	49	42	62	0	0	0					449	340
SINGAPORE	16	16	0	0	33	0	33	0					98	123
TAIWAN	791	227	114	818	437	959	315	542					4203	14045
THAILAND	58	93	95	123	64	65	66	79					643	765
UNITED KINGDOM	1881	1492	2076	1029	1282	1718	1195	1140					11813	12842
ALL OTHER COUNTRIES [c]	351	85	147	79	79	91	122	194					1148	2869
TOTAL SYNTHETIC YARN	15936	11391	14145	13240	14594	14410	14049	13893					111658	123652
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53	11	11	6	14	6	0					101	105
AUSTRALIA	38	120	30	72	63	106	89	88					606	560
BELGIUM	1	16	0	158	0	78	15	350					618	721
CANADA	3703	2439	3082	2325	2156	1402	1950	2210					19267	8726
FRANCE	592	297	769	436	558	364	529	368					3913	2571
GERMANY, FED. REP. OF	1017	1236	1063	1205	1618	1398	1044	964					9545	12766
INDIA	1731	1055	4215	0	2528	1752	1810	599					13690	12595
IRELAND	0	26	0	0	0	84	80	121					311	1449
ITALY	422	318	534	204	206	176	85	88					2033	1486
JAPAN	1754	1763	2307	1539	1531	1874	2013	2150					14931	17681
KOREA, REP. OF	1786	1273	1778	2043	3441	4750	4477	3887					23435	31789
MEXICO	3590	2041	2015	2355	3385	1382	932	1002					16702	5478
NETHERLANDS	1	0	57	20	10	20	0	24					132	1113
SPAIN	35	0	0	0	0	93	32	29					189	418
SWITZERLAND	399	124	87	385	107	280	105	220					1707	1234
TAIWAN	888	572	931	1400	1476	1215	1458	1365					9305	8581
TURKEY	112	114	0	0	0	0	76	0					302	361
UNITED KINGDOM	2249	1868	2834	2159	2242	1157	828	841					14178	14727
ALL OTHER COUNTRIES [d]	549	326	137	92	219	1362	1099	25					3809	454
TOTAL SYNTHETIC STAPLE+TOW	18867	13641	19850	14404	19546	17507	16628	14331					134774	122815

a. Italy 90, Ecuador 67, France 36, Australia 35, India 34, Taiwan 22, Belgium 20, Uruguay 13, Turkey 12, Thailand 6, Hungary 3, Hong Kong 1.

b. Finland 2634, Spain 2107, Thailand 1085, Yugoslavia 397, China, PRC 351, Italy 151, Mexico 119, France 86, Netherlands 81, Venezuela 74, Brazil 7, Czechoslovakia 3.

c. Spain 268, Ireland 235, Switzerland 100, Turkey 99, Paraguay 83, El Salvador 80, Sweden 59, Morocco 47, Austria 44, Hong Kong 44, Finland 22, China, PRC 19, India 15, Yugoslavia 8, Haiti 6, Colombia 5, Greece 5, Honduras 5, Australia 2, Dominican Republic 2.

d. Brazil 2308, Venezuela 395, China, PRC 321, Thailand 209, Sweden 180, Malaysia 136, Romania 86, Hong Kong 64, Denmark 63, Poland 47.

TABLE 8:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208	240	163	110	92	266	421					1742	1724
TEXTURED	54	8	0	33	32	81	32	43					283	787
OTHER	1385	1371	1471	1528	2171	1855	1524	1682					12987	13633
MONOFILAMENTS & STRIPS	150	37	152	38	38	37	107	1					560	763
SUBTOTAL ABOVE	**1831**	**1624**	**1863**	**1762**	**2351**	**2065**	**1929**	**2147**					**15572**	**16907**
STAPLE	5989	5884	6154	6846	7218	8895	11534	11829					64349	36727
TOW	312	210	307	342	331	230	460	710					2902	253
TOPS	3	0	0	3	0	0	0	0					6	55
SUBTOTAL ABOVE	**6304**	**6094**	**6461**	**7191**	**7549**	**9125**	**11994**	**12539**					**67257**	**37035**
WASTE	**0**	**0**	**0**	**22**	**0**	**88**	**44**	**11**					**165**	**494**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856	1437	1000	1336	1220	1207	1272					9763	12193
TEXTURED														
UP TO 450 DENIER	270	333	253	338	520	212	297	327					2550	2641
OVER 450 DENIER	2936	1350	2132	3039	3721	3074	3821	2935					23008	8790
POY	0	0	0	0	0	0	1712	2149					3861	0
OTHER	4531	3817	4273	2090	2435	3285	340	579					21350	32366
MONOFILAMENTS & STRIPS	216	117	148	191	134	164	152	123					1245	844
SUBTOTAL ABOVE	**9388**	**6473**	**8243**	**6658**	**8146**	**7955**	**7529**	**7385**					**61777**	**56834**
POLYESTER														
HIGH TENACITY	614	408	506	421	345	457	545	580					3876	5698
TEXTURED	785	643	626	923	581	1368	1278	1112					7316	14197
POY	719	119	117	758	251	716	206	472					3358	13305
OTHER	2038	1457	1459	1683	1949	1300	1243	1839					12968	12349
MONOFILAMENTS & STRIPS	53	0	67	40	53	38	57	76					384	466
SUBTOTAL ABOVE	**4209**	**2627**	**2775**	**3825**	**3179**	**3879**	**3329**	**4079**					**27902**	**46015**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408	2224	1880	2281	1847	2207	1905					15203	13155
OTHER	277	223	301	276	307	324	410	284					2402	3631
MONOFILAMENTS & STRIPS	611	660	602	601	681	405	574	540					4674	4017
SUBTOTAL ABOVE	**2339**	**2291**	**3127**	**2757**	**3269**	**2576**	**3191**	**2729**					**22279**	**20803**
STAPLE														
NYLON	4048	3037	4055	3032	3267	2179	2715	3119					25452	12810
POLYESTER	9261	5813	9622	6652	12118	11296	10832	8084					73678	72391
ACRYLIC	1711	1729	2063	1586	860	1458	1273	890					11570	12302
POLYPROPYLENE	543	37	160	27	105	90	173	168					1303	1313
OTHER	196	190	320	146	151	362	251	256					1872	3439
TOW														
NYLON	409	308	555	385	603	471	647	408					3786	2836
POLYESTER	15	70	70	2	26	174	161	146					664	622
ACRYLIC	2512	1973	2649	2252	2133	1350	513	967					14349	14122
OTHER	70	5	35	105	135	0	6	67					423	412
TOPS	102	479	321	217	148	127	57	226					1677	2568
SUBTOTAL ABOVE	**18867**	**13641**	**19850**	**14404**	**19546**	**17507**	**16628**	**14331**					**134774**	**122815**
WASTE														
NYLON	2694	2074	1628	1933	1267	1940	2123	1864					15523	15627
POLYESTER	2703	2241	1882	1067	3127	2128	1675	1978					16801	8498
OTHER	444	571	1027	602	838	876	568	819					5745	4021
TOTAL MANUFACTURED FIBERS ABOVE	**48779**	**37636**	**46856**	**40221**	**49272**	**48139**	**49010**	**47882**					**367795**	**329049**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59	54	62	59	121	89	147					706	808
SPUN YARN	427	503	318	594	534	436	436	608					3856	3633
SPUN YARNS														
SYNTHETIC	2420	2155	2639	1902	2841	2270	1903	1731					17861	37456
ARTIFICIAL	0	0	0	0	0	0	0	0					0	0
PUT UP FOR RETAIL SALE	32	24	70	34	87	88	106	156					597	479
GRAND TOTAL ABOVE	**51773**	**40377**	**49937**	**42813**	**52793**	**51054**	**51544**	**50524**					**390815**	**371425**

SOURCE: U.S. Census Bureau Report IM145X.

TABLE 9:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37	44	6	45	157	260	52					693	330
TEXTURED	217	9	30	284	101	114	104	92					951	1602
OTHER	66	106	57	64	46	18	63	64					484	952
MONOFILAMENTS & STRIPS	97	0	15	11	26	3	9	15					176	237
SUBTOTAL ABOVE	**472**	**152**	**146**	**365**	**218**	**292**	**436**	**223**					**2304**	**3121**
STAPLE	1195	2051	1838	1329	1645	1171	1168	1717					12114	14554
TOPS	333	0	203	187	185	58	0	110					1076	440
SUBTOTAL ABOVE	**1528**	**2051**	**2041**	**1516**	**1830**	**1229**	**1168**	**1827**					**13190**	**14994**
WASTE	**330**	**407**	**614**	**547**	**603**	**587**	**329**	**471**					**3888**	**8880**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357	9332	8892	15463	10230	8865	10506					78402	76164
TEXTURED														
UP TO 450 DENIER	1571	588	626	2098	791	751	644	867					7936	5927
OVER 450 DENIER	5636	4353	5225	4130	3350	4019	3295	4157					34165	34574
OTHER	2637	2264	3143	2401	2191	2066	1248	2562					18512	16733
MONOFILAMENTS & STRIPS	8	32	93	33	42	35	14	12					269	1738
SUBTOTAL ABOVE	**17609**	**14594**	**18419**	**17554**	**21837**	**17101**	**14066**	**18104**					**139284**	**135136**
POLYESTER														
HIGH TENACITY	4308	5166	5459	4737	3944	4664	3644	3610					35532	27326
TEXTURED	3074	3021	4078	3508	3650	4310	1507	3938					27086	23335
POY	1831	2368	1287	1783	2918	1306	749	966					13208	10067
OTHER	1297	1746	1824	1275	2294	1566	1061	2504					13567	7021
MONOFILAMENTS & STRIPS	185	285	91	93	188	186	116	137					1281	2011
SUBTOTAL ABOVE	**10695**	**12586**	**12739**	**11396**	**12994**	**12032**	**7077**	**11155**					**90674**	**69760**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523	549	801	424	434	461	758					4485	6866
OTHER	2035	2007	2279	2972	4061	1909	1369	2229					18861	12420
MONOFILAMENTS & STRIPS	876	913	1664	1218	1223	1230	831	1160					9115	6456
SUBTOTAL ABOVE	**3446**	**3443**	**4492**	**4991**	**5708**	**3573**	**2661**	**4147**					**32461**	**25742**
STAPLE														
NYLON	3163	2765	2343	3257	2210	1729	1591	1908					18966	23355
POLYESTER	7157	6405	9490	7701	8861	6382	4256	5919					56171	85480
ACRYLIC	4584	3178	3882	3938	4697	6363	4961	6581					38182	53238
POLYPROPYLENE	2038	1561	2666	3226	2211	2805	2562	2342					19411	14938
OTHER	2688	923	1504	961	1818	1062	802	1559					11317	13830
TOW														
NYLON	121	176	155	304	145	191	152	128					1372	583
POLYESTER	18	64	0	100	6	52	321	54					615	2989
ACRYLIC	1710	1787	989	956	1245	1506	2418	2856					13467	12550
OTHER	26	12	15	243	0	679	7	504					1486	820
TOPS	3984	2729	2309	4760	2552	4741	7817	5715					34607	14105
SUBTOTAL ABOVE	**25489**	**19600**	**23353**	**25444**	**23745**	**25510**	**24887**	**27566**					**195594**	**221888**
WASTE														
NYLON	4117	4250	3894	2746	3957	3139	3630	2527					28260	17998
POLYESTER	3268	2845	2782	3321	2596	1833	1190	1860					19695	29559
OTHER	3343	3700	4979	4352	4994	6193	3494	7610					38665	53982
TOTAL MANUFACTURED FIBERS ABOVE	**70297**	**63628**	**73459**	**72232**	**78482**	**71489**	**58938**	**75490**					**564015**	**581060**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	28	45	32	25	68	13	128	3					342	401
SPUN YARN	0	0	0	0	0	0	0	0					0	0
SPUN YARNS														
SYNTHETIC	3007	4304	3749	4278	4103	3890	3415	5684					32430	23275
ARTIFICIAL	0	0	0	0	0	0	0	0					0	0
PUT UP FOR RETAIL SALE	287	398	641	746	789	715	970	927					5473	5056
GRAND TOTAL ABOVE	**73619**	**68375**	**77881**	**77281**	**83442**	**76107**	**63451**	**82104**					**602260**	**609792**

SOURCE: U.S. Census Bureau Report EM522

TABLE 10:
FILAMENT YARN DOMESTIC SHIPMENTS[a]

MILLION POUNDS

		ANNUAL DATA				QUARTERLY DATA							
						1989				1990			
ITEM		1986	1987	1988	1989	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
(C) CELLULOSIC YARN			*(N) NYLON*			*(P) POLYESTER*				*(O) OLEFIN*			
HOSIERY[b]	N	95.1	93.2	100.3	j	j	j	j	j	j	j		
OTHER CIRCULAR KNIT[c]	N	21.3	25.3	26.4	139.1	32.5	33.8	34.8	38.0	29.8	34.7		
	P	150.3	102.8	119.5	132.4	40.4	33.5	31.1	27.4	22.7	26.0		
	C	2.0	1.1	0.6	0.5	0.2	0.1	0.1	0.1	0.2	0.2		
FLAT KNIT	C	47.8	27.9	24.3	21.4	6.1	7.5	3.7	4.1	5.1	4.5		
	N	133.8	131.4	133.4	125.2	36.0	34.4	29.8	25.0	23.3	26.2		
	P	167.1	162.5	162.1	181.0	46.0	47.7	44.5	42.8	38.7	44.3		
CARPET FACE	N	881.4	916.0	938.3	932.3	225.0	233.8	243.7	229.8	239.6	232.1		
	O	215.7	244.5	266.6	249.9	69.0	63.3	60.2	57.4	84.7	89.5		
CARPET BACKING[d]	O	404.1	425.3	427.0	463.4	105.4	123.4	120.6	114.0	116.7	117.3		
OTHER BROAD WOVEN[e]	C	126.3	122.8	141.9	149.4	35.6	38.5	37.8	37.5	33.8	37.0		
	N	76.2	79.4	78.3	88.8	21.1	22.6	21.9	23.2	24.9	24.1		
	P	344.4	379.4	391.3	366.3	100.7	106.1	80.7	78.8	84.3	93.3		
	O	271.5	317.7	337.3	337.5	88.8	84.3	83.6	80.8	91.1	111.8		
NARROW WOVEN[f]	C	2.0	2.2	4.4	4.4	1.7	0.8	1.0	0.9	0.8	1.3		
	N	33.9	42.1	42.0	36.9	9.5	10.2	8.4	8.8	8.2	8.8		
	P	44.0	66.2	81.0	76.4	18.8	23.2	20.0	14.4	16.6	17.9		
	O	17.5	17.7	19.0	19.8	4.8	4.7	5.2	5.1	3.9	4.4		
TIRES, INCL. CHAFER[g]	N	134.2	143.0	132.2	135.7	34.3	33.6	32.6	35.2	31.0	32.8		
	P	159.3	162.8	171.8	169.3	41.7	43.6	42.3	41.7	40.9	42.6		
OTHER RUBBER INDUSTRY[c g]	N	15.2	16.4	20.4	18.1	4.5	4.4	5.0	4.2	5.0	4.6		
	P	27.2	34.5	25.2	32.7	6.3	8.2	8.9	9.3	8.6	13.0		
ROPE, CORDAGE & FISHLINE	N	36.4	37.9	36.4	34.2	8.8	9.2	7.9	8.3	9.5	9.3		
	P	13.0	13.4	12.5	14.4	3.2	3.8	3.5	3.9	4.0	3.8		
	O	106.3	106.7	120.3	125.6	33.5	30.4	24.9	36.8	28.6	30.6		
ALL OTHER[h]	C	14.0	12.8	11.4	11.6	2.4	3.4	3.0	2.8	0.2	0.3		
	N	52.1	69.6	64.7	65.0	16.2	17.7	16.8	14.3	11.2	10.6		
	P	187.1	191.8	194.0	138.2	34.9	37.5	33.1	32.7	25.9	31.0		
	O	34.1	23.6	29.6	29.8	6.5	9.4	7.1	6.8	10.8	11.8		
TOTAL ABOVE	C	**192.1**	**166.8**	**182.6**	**187.3**	**46.0**	**50.3**	**45.6**	**45.4**	**40.1**	**43.3**		
	N	**1479.6**	**1554.3**	**1572.4**	**1575.3**	**387.9**	**399.7**	**400.9**	**386.8**	**382.5**	**383.2**		
	P	**1092.4**	**1113.4**	**1157.4**	**1110.7**	**292.0**	**303.6**	**264.1**	**251.0**	**241.7**	**271.9**		
	O	**1049.2**	**1135.5**	**1199.8**	**1226.0**	**308.0**	**315.5**	**301.6**	**300.9**	**335.8**	**365.4**		
TOTAL DOMESTIC		**3813.3**	**3970.0**	**4112.2**	**4099.3**	**1033.9**	**1069.1**	**1012.2**	**984.1**	**1000.1**	**1063.8**		
ALSO DIVIDED AS													
APPAREL		*962.4*	*930.2*	*941.2*	*924.7*	*253.4*	*253.3*	*217.1*	*200.9*	*192.5*	*216.6*		
HOME FURNISHINGS		*1738.0*	*1838.4*	*1902.6*	*1927.2*	*468.6*	*498.1*	*489.9*	*470.6*	*509.8*	*515.0*		
INDUSTRIAL		*1112.9*	*1201.4*	*1268.4*	*1247.4*	*311.9*	*317.7*	*305.2*	*312.6*	*297.8*	*332.2*		
SHIPMENTS OF FEED & PRODUCER-TEXTURED YARN (NONCARPET)[i]													
NYLON		115.8	NA	NA	NA	NA	NA	NA	NA	NA	NA		
POLYESTER		634.6	626.3	649.9	597.3	164.5	164.0	138.7	130.1	123.2	144.6		
OLEFIN		22.9	26.6	24.4	26.0	6.9	4.5	8.0	6.6	7.4	8.0		

NA No longer available.

a. Filament yarn plus monofilament shipments by primary trade or end use; olefin includes spunbonded polypropylene but does not include spunbonded polyethylene.

b. Small quantities of polyester and cellulosic yarn are included in All Other.

c. Small quantities of olefin are included in All Other.

d. Small quantities of nylon and polyester are included in All Other.

e. Other Broad Woven except carpets, tire fabric, flat belting, etc.

f. Narrow Woven includes apparel ribbons and braids, auto seat belts and/or furniture webbing.

g. Cellulosic yarn quantities included in All Other.

h. All Other includes sewing thread and other industrial applications. The olefin quantities include sliver knit backing. Also includes indirect exports.

i. These quantities are included in the Total Domestic area above.

j. Nylon quantities are included in Other Circular Knit.

TABLE 11:
STAPLE+TOW DOMESTIC SHIPMENTS

MILLION POUNDS

(R) RAYON[h] (N) NYLON (A) ACRYLIC+MODACRYLIC (P) POLYESTER (O) OLEFIN

ITEM		ANNUAL DATA				QUARTERLY DATA							
						1989				1990			
		1986	1987	1988	1989	1ST Q	2ND Q	3RD Q	4TH Q	1ST Q	2ND Q	3RD Q	4TH Q
HOSIERY, SWEATERS & CRAFT YARNS[a]	A	228.8	192.4	183.2	174.5	48.4	47.3	41.5	37.3	41.0	32.0		
	NPR	5.0	3.5	2.7	2.1	0.6	0.4	0.5	0.6	0.6	0.5		
PILE FABRICS[b]	A	23.2	20.8	21.3	20.0	5.1	6.0	5.0	3.9	4.2	4.4		
	P	15.0	19.7	14.7	15.3	3.7	4.0	4.1	3.5	3.5	3.5		
OTHER CIRCULAR KNIT + FLAT KNIT[c]	R	4.7	3.7	2.5	NA	NA	NA	NA	NA	NA	NA		
	A	196.3	185.1	139.0	132.4	35.7	34.9	36.4	25.4	32.5	33.8		
	P	367.8	453.3	470.0	519.5	127.8	131.4	132.0	128.3	123.4	129.1		
BLANKETS[b]	A	26.7	25.7	25.1	29.8	7.4	9.3	8.0	5.1	i	i		
	P	3.7	9.2	6.9	9.2	2.3	2.9	2.4	1.6	1.4	0.6		
OTHER BROAD WOVEN	R	218.0	230.7	243.0	NA	NA	NA	NA	NA	NA	NA		
	N	37.0	38.7	35.2	32.7	8.1	7.8	8.7	8.1	6.2	8.6		
	A	35.3	41.7	39.3	40.5	12.6	11.5	7.9	8.5	13.1	13.3		
	P	885.6	839.2	863.5	821.8	200.8	226.4	197.6	197.0	165.7	173.4		
	O	18.0	20.2	17.1	33.4	5.2	9.0	9.1	10.1	10.4	9.4		
CARPET FACE YARNS[f]	R	0.4	+	0.4	NA	NA	NA	NA	NA	NA	NA		
	N	837.8	905.1	887.7	894.9	226.3	217.3	230.3	221.0	230.2	227.9		
	P	145.0	209.0	261.2	211.6	60.1	51.3	48.6	51.6	48.0	40.1		
	O	117.2	116.2	138.2	137.7	38.5	35.1	32.9	31.2	34.2	36.3		
FIBERFILL[d]	P	294.9	348.6	357.2	349.5	90.4	93.6	79.2	86.3	90.6	90.8		
FLOCK	NP	5.9	5.5	6.9	7.5	1.8	1.7	1.7	2.3	1.9	2.6		
	R	1.8	0.9	0.1	NA	NA	NA	NA	NA	NA	NA		
NONWOVENS[e]	R	125.4	124.4	122.3	NA	NA	NA	NA	NA	NA	NA		
	N	2.1	1.9	2.1	2.4	0.7	0.6	0.6	0.5	0.6	0.7		
	P	175.4	204.2	244.1	271.5	68.0	71.7	65.8	66.0	54.4	60.0		
	[g] VINYON+O	166.2	198.0	180.9	183.0	46.1	46.7	46.8	43.4	47.0	53.9		
ALL OTHER	R	20.8	22.7	17.2	NA	NA	NA	NA	NA	NA	NA		
	N	11.9	14.8	13.7	17.8	5.3	3.8	4.3	4.4	3.9	3.2		
	A	20.9	13.6	13.2	17.4	3.7	3.4	4.0	6.3	8.0	10.5		
	P	108.3	115.0	91.3	61.0	21.5	12.9	13.0	13.6	14.8	13.0		
	[g] VINYON+O	11.3	6.7	8.0	9.3	1.8	2.7	2.6	2.2	2.4	2.3		
TOTAL ABOVE	**R**	**373.0**	**383.1**	**386.0**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**		
	N	**894.9**	**966.0**	**944.9**	**955.3**	**242.0**	**231.2**	**245.8**	**236.3**	**242.6**	**243.1**		
	A	**531.2**	**479.3**	**421.1**	**414.8**	**112.9**	**112.4**	**102.8**	**86.7**	**98.8**	**94.0**		
	P	**1998.6**	**2201.0**	**2311.8**	**2261.3**	**575.4**	**594.6**	**543.0**	**548.3**	**502.6**	**510.9**		
	[g] VINYON+O	**312.7**	**341.1**	**344.2**	**363.4**	**91.6**	**93.5**	**91.4**	**86.9**	**94.0**	**101.9**		
TOTAL DOMESTIC		**4110.4**	**4370.5**	**4408.0**	**3994.8**	**1021.9**	**1031.7**	**983.0**	**958.2**	**938.0**	**949.9**		
ALSO DIVIDED AS													
APPAREL		*1489.3*	*1479.9*	*1421.6*	*1266.8*	*323.3*	*347.1*	*313.4*	*283.0*	*278.8*	*274.0*		
HOME FURNISHINGS		*1625.8*	*1755.8*	*1827.5*	*1695.7*	*439.0*	*418.4*	*421.2*	*417.1*	*415.8*	*408.9*		
INDUSTRIAL		*995.3*	*1134.8*	*1158.9*	*1032.3*	*259.6*	*266.2*	*248.4*	*258.1*	*243.4*	*267.1*		

NA No longer available.

a. Olefin quantities are included in All Other.
b. Rayon and nylon quantities are included in All Other.
c. Nylon quantities are included in All Other.
d. Rayon, acrylic and nylon quantities are included in All Other.
e. Wet & dry laid and needled batts only.
f. Acrylic and nylon quantities are included in All Other.
g. 1987-1990 data exclude Vinyon.
h. Rayon staple+tow data no longer available in 1989 - 1990.
i. Acrylic quantities are included in All Other.

TABLE 12:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

ITEM	1990												YEAR TO DATE[a]	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
	MANUFACTURED FIBER TOTAL SHIPMENTS[b,c]													
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4	18.1	17.4	16.9	19.1	17.3	17.6				154.3	165.0
RAYON STAPLE	30.1	25.3	26.3	28.2	25.1	22.6	24.8	25.0	25.3				232.7	281.1
TOTAL ARTIFICIAL (CELLULOSIC)	**45.2**	**40.7**	**43.7**	**46.3**	**42.5**	**39.5**	**43.9**	**42.3**	**42.9**				**387.0**	**446.1**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4	28.4	28.8	27.6	24.9	30.6	32.5				256.4	275.2
- CARPET	86.5	81.1	82.2	85.6	80.1	75.8	71.8	88.4	80.7				732.2	728.2
- TEXTILE	28.9	28.2	29.9	32.0	32.0	31.3	29.0	31.0	31.9				274.2	301.5
POLYESTER - INDUSTRIAL[d]	27.2	28.6	31.8	32.9	30.1	30.2	28.2	29.6	28.5				267.1	276.1
- TEXTILE[f]	56.6	56.2	58.0	69.8	68.4	61.4	59.2	68.9	65.2				563.7	626.0
OLEFIN[e]	107.2	116.5	116.7	124.2	124.5	122.2	117.4	128.2	128.7				1085.6	943.9
TOTAL YARN	**331.3**	**340.9**	**347.0**	**372.9**	**363.9**	**348.5**	**330.5**	**376.7**	**367.5**				**3179.2**	**3150.9**
STAPLE+TOW+FIBERFILL														
NYLON	88.8	74.9	86.0	85.0	87.0	77.6	72.2	87.7	81.9				741.1	736.7
ACRYLIC+MODACRYLIC	40.4	39.7	43.2	39.7	43.0	43.8	38.6	45.5	42.1				376.0	414.2
POLYESTER	168.9	175.7	173.3	182.2	176.3	167.6	156.7	180.0	179.2				1559.9	1789.7
OLEFIN	30.3	34.4	35.3	35.1	36.0	37.1	31.4	36.9	34.6				311.1	286.7
TOTAL STAPLE	**328.4**	**324.7**	**337.8**	**342.0**	**342.3**	**326.1**	**298.9**	**350.1**	**337.8**				**2988.1**	**3227.3**
TOTAL SYNTHETIC (NONCELLULOSIC)	**659.7**	**665.6**	**684.8**	**714.9**	**706.2**	**674.6**	**629.4**	**726.8**	**705.3**				**6167.3**	**6378.2**
TOTAL MANUFACTURED FIBER	**704.9**	**706.3**	**728.5**	**761.2**	**748.7**	**714.1**	**673.3**	**769.1**	**748.2**				**6554.3**	**6824.3**
	MANUFACTURED FIBER END-OF-MONTH STOCK													
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8	9.1	7.6	8.7	8.9	8.3	8.3				8.3	11.6
RAYON STAPLE	20.2	17.2	14.0	14.2	11.9	10.1	12.4	10.6	9.2				9.2	18.1
TOTAL ARTIFICIAL (CELLULOSIC)	**29.9**	**27.1**	**22.8**	**23.3**	**19.5**	**18.8**	**21.3**	**18.9**	**17.5**				**17.5**	**29.7**
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4	36.0	30.1	35.7	42.2	36.9	34.6				34.6	28.7
- CARPET	60.5	61.2	62.6	63.2	65.4	78.2	82.3	70.2	71.7				71.7	54.6
- TEXTILE[f]	57.0	59.9	64.3	63.5	63.5	62.9	62.1	60.2	57.9				57.9	56.3
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5	39.2	37.9	35.8	35.6	35.5	35.7				35.7	33.2
- TEXTILE[f]	94.5	104.9	109.9	106.4	99.7	100.8	100.2	91.5	86.5				86.5	116.8
OLEFIN[e]	68.1	66.6	66.0	63.9	63.8	65.2	63.6	62.6	61.1				61.1	62.3
TOTAL YARN	**356.2**	**366.9**	**375.7**	**372.2**	**360.4**	**378.6**	**386.0**	**356.9**	**347.5**				**347.5**	**351.9**
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1	44.3	47.7	60.5	65.3	59.6	58.9				58.9	46.8
ACRYLIC+MODACRYLIC	69.5	70.9	72.8	75.3	78.9	83.2	87.0	86.3	86.0				86.0	66.3
POLYESTER	193.5	195.1	192.9	217.4	210.8	212.4	216.8	197.1	187.0				187.0	218.9
OLEFIN	34.6	33.4	31.5	29.8	28.5	28.6	29.8	29.6	28.3				28.3	30.5
TOTAL STAPLE	**337.7**	**339.9**	**334.3**	**366.8**	**365.9**	**384.7**	**398.9**	**372.6**	**360.2**				**360.2**	**362.5**
TOTAL SYNTHETIC (NONCELLULOSIC)	**693.9**	**706.8**	**710.0**	**739.0**	**726.3**	**763.3**	**784.9**	**729.5**	**707.7**				**707.7**	**714.4**
TOTAL MANUFACTURED FIBER	**723.8**	**733.9**	**732.8**	**762.3**	**745.8**	**782.1**	**806.2**	**748.4**	**725.2**				**725.2**	**744.1**
	COTTON CONSUMPTION													
RAW COTTON	317.3	332.1	365.9	327.8	336.8	381.0	293.8	281.8					2636.5	2618.1

	WOOL CONSUMPTION[g]					
	1ST QUARTER	**2ND QUARTER**	**3RD QUARTER**	**4TH QUARTER**		
APPAREL CLASS WOOL	31.7	32.4			64.1	69.9
CARPET CLASS WOOL	3.8	3.6			7.4	7.2
TOTAL RAW WOOL	**35.5**	**36.0**			**71.5**	**77.1**

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a. "Year to date" totals for stock, are the latest month's figures.

b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.

c. Producers' total domestic shipments plus export shipments.

d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.

e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.

f. Includes low denier industrial yarn.

g. **Wool data for 1990 available on a quarterly basis only.**

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- Indirect Exports

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- Domestic Shipments
- Imports
- Exports
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Fiber Economics Bureau, Inc.
Formerly Textile Economics Bureau, Inc.
101 Eisenhower Parkway
Roseland, New Jersey 07068
Telephone (201) 228-1107
FAX (201) 228-7598